



November 22, 2016

Log No. FIU006

Alberto Delgado
Florida International University
11555 SW 17 ST CSC 251
Miami, FL 33199

E-MAILED

UniversityCity Pedestrian Bridge•Contract # BT-904/ARI 73•Federal Project ID 434688-1-58-01
MCM # 2015-711

RE: NOI#001 - Pylon Location – Additional Services
Request for Equitable Adjustment REA-COR#006
MCM Letter Log. No. FIU#004

Dear Mr. Delgado,

As a follow up to our recent correspondence, meetings, and Notice of Intent, attached please find MCM's Request for Equitable Adjustment REA-COR#006 pursuant to Section 5-19. We have provided a cost breakdown detailing the required re-design/re-permitting of the pedestrian crossing necessary to accommodate an additional and recently presented future widening of SW 8th Street that was not contemplated in the original concept documents, our Technical Proposal and, only recently discussed during the Final Foundation/Substructure and 90% Superstructure design submittal for the Bridge.

Following several meetings, and correspondence, the best solution to this change is to relocate the currently designed structure 11' North. This relocation will accommodate the future Westbound widening (Northside of SW 8th Street) for the future planned Premium Transit Corridor Services.. A scope of services has been prepared by the Engineer of Record (EOR), FIGG, and is attached herein. The designers are requesting a Contract Time extension of 3-months from the date when the revised design is issued a Notice to Proceed (NTP). Based upon an interruption of design and permitting process commencing in early October, several weeks of meetings and development of a solution between the stakeholders and an estimated period of four (4) weeks for the scope preparation, review, approval, funding and formal authorization to proceed, MCM has projected the required Contract Time impact will require a Contract Time extension of 180-calendar days. We respectfully request FIU and the Department to provide input as to the actual time required to fully authorize this change.

Our Request includes our estimate of the changes to the design required for the construction and extended overhead cost. Currently, we have continued to pursue the project as originally contracted. However, FDOT is withholding comments on previously submitted plans that, in effect, suspended the review process and approved RFC drawings that are critical and controlling elements of the project schedule.

Based on the above, we respectfully request FIU to review and approve the additional services for design and permitting, as soon as possible, to permit the release of this scope right away avoiding further delays.

Should you have any comments, and/or require a meeting to expedite the process, feel free to reach us at your convenience.

Sincerely,
MCM



Rodrigo Isaza
Senior Project Manager

Encl: REA-COR#006 (15 pgs)
MCM Letter Log No. FIU004 (17 pgs)
MCM Email dated 3Nov16 (22 pgs)

Cc: John Cal, FIU
Juan Munilla, MCM
Robert T. Murphy, P.E., MCM
Jose Morales, P.E., BPA
File



CHANGE ORDER REQUEST

DATE:22-Nov-16

COR #:006

Ref. NOI #:001

Ref. FIU CO #:TBD

PROJECT:University City Prosperity Project Infrastructure Improvements

MCM # 15-711 - Federal Project ID: 434688-1-58-01 - Contract # ARI73

TO:Alberto Delgado

Florida International University

11555 SW 17 ST CSC 251

Miami, FL 33199

RE:NOI#001 - Pylon Relocation - Additional Services

Request for Equitable Adjustment - REA

DESCRIPTION:
Reference MCM Letter Log No. FIU006.

Due to the time constrains, it is expressly agreed this Change Order Proposal is limited to the work described herein, and does not include any other work not listed in the COR nor any amounts for additional changes in the sequence of work, delays, disruptions, extended home or field office overhead, acceleration, unforeseen conditions, overtime and/or time impact costs. MCM hereby reserves the right to make any additional claims for any and all of those related items MCM might have omitted due to the time constraints and complexity of this revision. MCM expressly reserves the right to claim additional time for this Change Order Proposal and pertinent compensation therefore.

LABOR			
(see attached documents)			
		\$	-
	MCM 17.5% on the above	\$	-
MATERIALS & SUPPLIES			
(see attached documents)			
		\$	-
	MCM 17.5% on the above	\$	-
EQUIPMENT			
(see attached documents)			
		\$	-
	MCM 17.5% on the above	\$	-
	Subtotal	\$	-

SUBCONTRACTS	195		
(see attached documents)			
		\$	1,367,686.48
	MCM 10% on initial \$50,000.00 Subs	\$	5,000.00
	MCM 5% on Subs	\$	65,884.32
	Subtotal	\$	1,438,570.80
	Bond & Insurance (0%)	\$	-
	Direct Costs Subtotal	\$	1,438,570.80

EXTENDED OVERHEAD	UNIT	QTY.	U. COST	
An anticipated projection of days to perform the above work beyond the original contract time has been noted, inclusive of MCM's liquidated indirect costs for construction days only. However, MCM reserves its rights to address any real cost/time associated with the additional services, at a later, and once the redesign, approval and permitting has been completed.	Days	180.00	\$ 1,225.19	\$ 220,534.57
				\$ -

IN CONTRACT PAY ITEMS:				
PAY ITEM	DESCRIPTION	UNIT	QTY.	U. COST
				\$ -
				\$ -
				Subtotal \$ -
				TOTAL: \$ 1,659,105.37

TOTAL OF THIS CHANGE ORDER REQUEST

ADD

DEDUCT

TBD

\$ 1,659,105.37

The Contract Time will be revised to reflect:

ADD

DEDUCT

TBD

To Be Determined

MCM

Rodrigo Isaza

Sr. Project Manager

22-Nov-16

General Contractor

Name

Title

Signature

Date

Having received the above, I hereby certify that to the best of my knowledge and belief, the cost or pricing data submitted reflects adequate values and that Contractor is entitled to payment and time extension as noted above.

FIU

Alberto Delgado

Project Manager

Owner

Name

Title

Signature

Date



SUBCONTRACTOR COST ANALYSIS

This constitutes the support for the Direct Cost on this Change Order Request

DATE: 22-Nov-16

COR #: 006

PROJECT: **University City Prosperity Project Infrastructure Improvements**
MCM # 15-711 - Federal Project ID: 434688-1-58-01 - Contract # ARI73

RE: **NOI#001 - Pylon Relocation - Additional Services**
Request for Equitable Adjustment - REA

SUBCONTRACTS

ITEM	SUBCONTRACTOR/ PAY ITEM	DESCRIPTION	UNIT	QTY	U.COST	SUB. TOT
DESIGN & PERMITTING						
1	FIGG	Lead Design Services and Structural	LS	1.00	\$ 181,566.00	\$ 181,566.00
2	APCTE	Wall, Permitting, Drainage, Roadway & Utilities	LS	1.00	\$ 56,859.00	\$ 56,859.00
3	Geosol	Geotechnical	LS	1.00	\$ 31,145.00	\$ 31,145.00
4	RBLDI	Plaza & Stairway lighting	LS	1.00	\$ 6,600.00	\$ 6,600.00
5	Miller Legg	Landscape/Hardscape	LS	1.00	\$ 5,684.00	\$ 5,684.00
6	SGM	MEP	LS	1.00	\$ 5,785.00	\$ 5,785.00
7	Manny Vera	Surveying	LS	1.00	\$ 18,621.00	\$ 18,621.00
8	Various	Permits	LS	1.00	\$ 12,000.00	\$ 12,000.00
SubTotal= \$						318,260.00

The cost is representative to the items listed below. These are subject to change once the redesign has been completed and approved by all agencies.

CONSTRUCTION - ESTIMATED COST

1	TBD	North Plaza				
2	TBD	Utility Relocation - Utility Pipe Water/Sewer	LF	420.00	\$ 195.00	\$ 81,900.00
3	TBD	Misc. Utility	LS	1.00	\$ 5,000.00	\$ 5,000.00
4	TBD	Concrete Sidewalk	SY	300.00	\$ 45.30	\$ 13,590.00
5	TBD	Bulkhead Wall & Anchors	LF	162.00	\$ 2,659.11	\$ 430,775.20
6	TBD	Wall Cap	CY	91.30	\$ 856.75	\$ 78,221.28
7	TBD	Canal				
8	TBD	Dewatering	LS	1.00	\$ 8,500.00	\$ 8,500.00
9	TBD	Tremmie Seal	CY	80.00	\$ 250.00	\$ 20,000.00
10	TBD	Riprap	LS	1.00	\$ 7,500.00	\$ 7,500.00
11	TBD	South Plaza				\$ -
12	TBD	Piling	LF	896.00	\$ 277.50	\$ 248,640.00
13	TBD	Pier Protection	LF	75.00	\$ 330.00	\$ 24,750.00
14	TBD	Drainage	LS	1.00	\$ 35,000.00	\$ 35,000.00
15	Geosol	Testing and Inspection	LS	1.00	\$ 46,350.00	\$ 46,350.00
16	Various	Electrical/Lighting	LS	1.00	\$ 15,000.00	\$ 15,000.00
17	Various	QA/QC	LS	1.00	\$ 10,000.00	\$ 10,000.00
18	Manny Vera	Survey - 3-Man Crew	HR	100.00	\$ 125.00	\$ 12,500.00
19	AIG	Builder's Risk	ED	180.00	\$ 65.00	\$ 11,700.00
SubTotal= \$						1,049,426.48

SubTotal= \$ 1,367,686.48



November 22, 2016

VIA E-Mail

Mr. Robert T. Murphy, P.E.
Telephone: 786.866.0342
Director of Civil Operations
MCM
6201 SW 70 St., 2nd Floor
Miami, FL 33143

REFERENCE: UniversityCity Prosperity Project, BT-904
Florida International University, Miami, FL
Additional Design Phase Services Scope
and Compensation Proposal
Change Order 5 Pedestrian Bridge Relocation
FIGG Project No. 2262.03

Dear Robert:

As requested, please find the attached revised Scope of Services and Compensation Proposal for relocating the new pedestrian bridge 11' to the north as directed by FIU for the above referenced project.

We look forward to accomplishing these services with the MCM/FIGG Team for FIU and the City of Sweetwater. Please let us know if you have any questions.

Sincerely,

FIGG

A handwritten signature in black ink, appearing to read "D. D. Dempsey", written over three lines.

Dwight D. Dempsey, P.E., S.E.
Regional Director

DDD
Attachments

xc: Mr. Eugene Collings-Bonfill, P.E., PMP, w/att.
Mr. Rodrigo Isaza, w/att.
Ms. Linda Figg, w/att.
Mr. Alan R. Phipps, P.E., S.E., w/att.
Ms. Gay W. Annin, CPA, w/att.



**CHANGE ORDER 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
FIGG BRIDGE ENGINEERS, INC.
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904
FOR
MUNILLA CONSTRUCTION MANAGEMENT
November 22, 2016**

FIGG PROJECT NO. 2262.03

This scope of services includes additional professional services to be provided by FIGG Bridge Engineers, Inc. (FIGG) as a subconsultant to Munilla Construction Management (MCM) for the UniversityCity Prosperity Project during the design phase for this design-build project. This scope of work pertains to the relocation of the new pedestrian bridge 11' to the north as requested by FIU and FDOT and shown in Attachment A. These services will be accomplished on a Lump Sum basis.

Scope

This scope of work includes the following activities (the detailed scope and fee documents are included in Attachment B):

1. **Pedestrian Bridge Design (FIGG)** – Activities include the following:
 - a) Perform analysis and design for the increased height of pylon due to lowered pylon foundation
 - b) Perform vehicular collision loads at the south bridge landing. Due to the new location of the south bridge landing to the traffic lanes, the spread footing design in the original design will change to a pile footing to handle the additional vehicular collision loads.
 - c) Perform superstructure analysis with updated mode shape analysis and perform superstructure design calculations with updated design loadings.
 - d) Update 36 bridge foundation, substructure, and superstructure plan sheets.
 - e) Revise elevator tower and foundation details based on revised bridge location.
 - f) Update calculation packages for submittal.
 - g) Redesign pedestrian bridge north overlook for connection to future development.
2. **Bulkhead Wall and Temporary Wall Design (APCTE)** – Perform analysis and design for an additional bulkhead wall at the south side of the C-4 canal. Adjust temporary critical sheet piling plans for revised pylon location and north bulkhead wall plans based on the new bridge foundation locations.
3. **Drainage Design (APCTE)** – Design of additional drainage required for the updated north and south plazas.



4. **Environmental Permits (APCTE)** – Coordination of the following permits will be modified and resubmitted:
 - a) SFWMD ROW Occupancy Permit for the North Plaza,
 - b) SFWMD ROW Occupancy Permit for the Pedestrian Bridge and Bulkhead Wall,
 - c) USACE 408 Permit, and
 - d) USACE 404 Permit.
5. **Roadway Design (APCTE)** – Update roadway, grading, traffic control, signing & pavement marking, and signalization plans to reflect the new bridge location.
6. **Utility Coordination (APCTE)** – Coordinate with Miami-Dade County Water & Sewer and FPL. This will include relocation plans for the affected utilities due to the new bridge location.
7. **Landscape & Hardscape Design (MILLER LEGG)** – Update landscape, hardscape, and irrigation design plans for revised layout of north and south plaza areas and new location of the pedestrian bridge.
8. **Geotechnical Design (GEOSOL)** – Activities include the following:
 - a) Perform two (2) borings at south bank of the C-4 canal for the proposed south bulkhead wall and two (2) borings for the proposed staging area to the west of Pier 1. Perform borehole exfiltration testing at two (2) locations for use in drainage evaluations and design.
 - b) Perform laboratory testing on borehole samples with results summarized in the form of Report of Core Boring Sheets.
 - c) Perform foundation analysis for the new driven pile foundations that will be required for Pier 1.
 - d) Perform wall analysis for the new bulkhead wall at the south bank of the C-4 canal.
 - e) Perform analysis and provide site preparation recommendations for the proposed staging area to the west of Pier 1.
 - f) Prepare a supplemental geotechnical report to present the results of the field investigations, laboratory testing and foundation recommendations.
9. **Lighting Design (RBLDI)** – Redesign and re-layout lighting fixtures within the revised north and south plaza areas and perform photometric analysis.
10. **Mechanical/Electrical/Plumbing Design (SGM)** – Update electrical design for revised layout of lighting fixtures in the north and south plaza areas. Update mechanical, electrical, and plumbing plans to reflect the new bridge location and updated north and south plaza areas.
11. **Survey and Mapping (MG Vera)** – Activities include the following:
 - a) Coordination with FDOT and SFWMD to determine ROW line on south side of C-4 canal.



- b) Revise FDOT aerial and ROW easement exhibits for new pedestrian bridge location.
- c) Designate and map the existing 30" water main at the intersection of SR-90 and SW 109th Avenue and the existing 8" water main at the intersection of SW 7th Terrace and SW 109th Avenue.
- d) Provide a bank of six (6) utility locates (test holes).
- e) Perform survey for additional geotechnical borings.

12. Project Management and Subconsultant Coordination (FIGG).

Schedule

This work will be accomplished within the schedule described below:

Updates to the Bridge Design, Geotechnical Design, Bulkhead Wall Design, Drainage Design, Environmental Permits, Roadway Design, Utility Coordination, Landscape & Hardscape Design, Lighting Design, MEP Design, and Survey will be accomplished within twelve (12) weeks following NTP.

Exclusions

- 1. This scope of work does not include an update to the Independent Peer Review (IPR) of the new pedestrian bridge based on the 11' shift to the north. If FIU/FDOT will require an update to the IPR, the scope and compensation related to this work effort would need to be added to this proposal.
- 2. This scope does not include any efforts associated with a NEPA re-evaluation as preliminary discussions with FIU/FDOT indicated that this would not be required.
- 3. The revised plans will be submitted in the following submittal packages. If a 90% submittal package will be required, the scope and compensation related to this work effort would need to be added to this proposal.
 - a. Final Design Submittal
 - b. RFC Submittal

Compensation

Compensation for these services will be \$306,260 lump sum.

**UNIVERSITYCITY PROSPERITY PROJECT, BT-904
FOR
MUNILLA CONSTRUCTION MANAGEMENT**

**FIGG Bridge Engineers, Inc.
FIGG Project No. 2262.03**

**Compensation Summary for Change Order No. 5
November 22, 2016**

Firm	Services Provided	Total
FIGG	Pedestrian Bridge Design & PM	\$181,566.00
APCTE	Bulkhead Wall, Permitting, Drainage, Roadway	\$56,859.00
MILLER LEGG	Landscape/Streetscape	\$5,684.00
GEOSOL	Geotech	\$31,145.00
RBLDI	Plaza & Bridge Lighting	\$6,600.00
SGM	Mechanical, Electrical, Plumbing	\$5,785.00
MGV	Survey and Mapping	\$18,621.00
Total		\$306,260.00

USE TOTAL LUMP SUM COMPENSATION

\$306,260.00

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
FIGG BRIDGE ENGINEERS (FIGG)
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
 County: Miami-Dade
 FPN: 434688-1-58-01
 FAP No.:

Consultant Name: FIGG Bridge Engineers, Inc.
 Consultant No.: 2262.03
 Date: 11/22/2016
 Estimator: D. Dempsey

Staff Classification	Total Staff Hours From "SH Summary -	Project Manager	Principal Bridge Engineer	Senior Bridge Engineer	Bridge Engineer/ Designer	CADD	Admin	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$105.00	\$129.00	\$68.00	\$44.00	\$40.00	\$34.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	235	24	47	71	94	0	0	0	0	0	0	0	0	236	\$17,547	\$74.35
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	658	33	66	132	263	165	0	0	0	0	0	0	0	659	\$39,127	\$59.37
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	130	7	13	39	72	0	0	0	0	0	0	0	0	131	\$8,232	\$62.84
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	1,053	64	126	242	429	165	0	0	0	0	0	0	0	1,026		
Total Staff Cost		\$6,720.00	\$16,254.00	\$16,456.00	\$18,876.00	\$6,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$64,906.00	\$63.26

Check = \$64,906.00

Survey Field Days by Subconsultant
 4 - Person Crew:

Notes:

- This sheet to be used by Prime Consultant to calculate the Grand Total fee.
- Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:

OVERHEAD: 149% \$64,906.00
 OPERATING MARGIN: 15% \$97,002.02
 FCCM (Facilities Capital Cost Money): 0.29% \$9,735.90
 EXPENSES: 15.00% \$186.93
 \$9,735.90

Survey (Field - if by Prime) 0 4-man crew days @ \$ - / day \$0.00
SUBTOTAL ESTIMATED FEE: \$181,566.75
SUBTOTAL ESTIMATED FEE: \$181,566.75
 Geotechnical Field and Lab Testing \$0.00
SUBTOTAL ESTIMATED FEE: \$181,566.75
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$181,566.75

ATTACHMENT B

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Key Sheet and Index of Drawings	Sheet	0	0	0	0					
9.2	Project Layout	Sheet	0	0	0	0					
9.3	General Notes and Bid Item Notes	Sheet	1	1	1	1	Update general notes sheet				
9.4	Miscellaneous Common Details	Sheet	0	0	0	0					
9.5	Incorporate Report of Core Borings	Sheet	0	0	0	0					
9.6	Existing Bridge Plans	LS	1	0		0					
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	0		0					
9.8	Cost Estimate	LS	1	0		0					
9.9	Technical Special Provisions	LS	1	0		0					
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					1	1					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	658	0	0	0	658	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									

ATTACHMENT B

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	0								0	
18	Miscellaneous Structures	130									130
Structures Technical Subtotal		788	0	0	0	658	0	0	0	0	130
Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments					
9.10	Field Reviews	LS	1	0	0						
9.11	Technical Meetings	LS	1	0	0	Meetings are listed below					
9.12	Quality Assurance/Quality Control	LS	%	10%	79	This should be (5% to 10%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")					
9.13	Independent Peer Review	LS	1	0	0	This is excluded from this scope of work					
9.14	Supervision	LS	%	7%	55	This should be (3% to 7%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")					
Structures Nontechnical Subtotal					134						
9.15	Coordination	LS	1	100	100	Coordination of subconsultants, performing interdisciplinary reviews of plans (roadway, drainage, permits, bulkhead/temporary walls, MEP, landscape, hardscape, irrigation, utility relocates and geotech report)					
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					235						

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	0	0	0		0
90/100% Comment Review	EA	0	0	0		0
Aesthetics Coordination	EA	0	0	0		0
Regulatory Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Utility Companies	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0		0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

ATTACHMENT B

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Carries to 9.11

Carries to Tab 3

ATTACHMENT B

Project Activity 13: Structures- Medium Span Concrete

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

Bridge Identifier (Number or Name):

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
General Layout Design and Plans							
13.1	Overall Bridge Final Geometry	LS	1	0		0	
13.2	Expansion/Contraction Analysis	EA Unit	0	0		0	
13.3	General Plan and Elevation	Sheet	1	8	1	8	
13.4	Construction Staging	Sheet	2	4	2	8	Construction sequence drawings
13.5	Approach Slab Plan and Details	Sheet	0	0	0	0	
13.6	Miscellaneous Details	Sheet	2	12	2	24	1) tremie seal for the pylon footing construction that is required due to lowering of the footing and 2) span 2 falsework foundation
End Bent Design and Plans							
13.7	End Bent Geometry	EA End Bent	0	0		0	
13.8	Wingwall Design and Geometry	EA End Bent	0	0		0	
13.9	End Bent Structural Design	EA Design	1	40		40	Pedestrian bridge north overlook to be designed for future connection to future development
13.10	End Bent Plan and Elevation	Sheet	0	0	0	0	
13.11	End Bent Details	Sheet	1	15	1	15	
Intermediate Bent Design and Plans							
13.12	Bent Geometry	EA Bent	0	0		0	
13.13	Bent Stability Analysis	EA Design	0	0		0	
13.14	Bent Structural Design	EA Design	0	0		0	
13.15	Bent Plan and Elevation	Sheet	0	0	0	0	
13.16	Bent Details	Sheet	0	0	0	0	
Pier Design and Plans							
13.17	Pier Geometry	EA Pier	0	0		0	
13.18	Pier Stability Analysis	EA Design	0	0		0	

ATTACHMENT B

Project Activity 13: Structures- Medium Span Concrete

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
13.19	Pier Structural Design	EA Design	1	300		300	100 hours for redesigning the pylon and footing based on the lowered footing elevation, 200 hours for redesigning Pier 1 footing and substructure for vehicular collision forces. The foundation type will change from spread footing to driven piles.
13.20	Pier Plan and Elevation	Sheet	0	0	0	0	
13.21	Pier Details	Sheet	16	8	16	128	South and north landing footing and substructure dimension and reinforcement drawings, Pylon dimension and reinforcement drawings
Miscellaneous Substructure Design and Plans							
13.22	Foundation Layout	Sheet	2	8	2	16	Foundation layouts and pile installation tables
Superstructure Deck Design and Plans							
13.23	Finish Grade Elevation (FGE) Calculation	LS	1	0		0	
13.24	Finish Grade Elevations	Sheet	0	0	0	0	
13.25	Bridge Deck Design	EA Section	1	100		100	Revise bridge computer models and perform mode shape analysis. Check superstructure design based on revised design loadings and prepare updated calculation packages
13.26	Bridge Deck Reinforcing and Concrete Quantities	EA Unit	0	0		0	
13.27	Diaphragm Design	EA Section	0	0		0	
13.28	Superstructure Plan	Sheet	0	0	0	0	
13.29	Superstructure Section	Sheet	0	0	0	0	
13.30	Miscellaneous Superstructure Details	Sheet	1	8	1	8	Deck reinforcement and PT
Reinforcing Bar Lists							
13.3	Preparation of Reinforcing Bar List	Sheet	11	1	11	11	Foundation and substructure reinforcing bar lists
Continuous Concrete Girder Design							
13.3	Section Properties	LS	1	0		0	
13.3	Material Properties	LS	1	0		0	
13.3	Construction Sequence	EA Unit	0	0		0	
13.4	Tendon Layouts	EA Unit	0	0		0	
13.4	Live Load Analysis	EA Unit	0	0		0	
13.4	Temperature Gradient	EA Unit	0	0		0	
13.4	Time Dependent Analysis	EA Unit	0	0		0	
13.39	Stress Summary	EA Unit	0	0		0	
13.40	Ultimate Moments	EA Unit	0	0		0	
13.4	Ultimate Shear	EA Unit	0	0		0	
13.4	Construction Loading	EA Unit	0	0		0	

ATTACHMENT B

Project Activity 13: Structures- Medium Span Concrete

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
13.4	Framing Plan	Sheet	0	0	0	0	
13.4	Girder Elevation, including Grouting Plan and Vent Locations	Sheet	0	0	0	0	
13.5	Girder Details	Sheet	0	0	0	0	
13.5	Erection Sequence	Sheet	0	0	0	0	
13.5	Splice Details	Sheet	0	0	0	0	
13.5	Girder Deflections and Camber	Sheet	0	0	0	0	
Simple Span Concrete Design							
13.49	Prestressed Beam	EA Design	0	0		0	
13.50	Prestressed Beam Schedules	Sheet	0	0	0	0	
13.51	Framing Plan	Sheet	0	0	0	0	
Beam Stability							
13.52	Beam/girder stability	EA Unit	0	0		0	
Bearing							
13.53	Bearing pad and bearing plate design	Type/ Span	0	0		0	
13.54	Bearing pad and bearing plate details	Sheet	0	0	0	0	
Load Rating							
13.55	Load Ratings	Per Beam	0	0		0	
13. Structures - Medium Span Concrete Bridge Total					36	658	

ATTACHMENT B

Project Activity 18: Miscellaneous Structures

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0		0	
18.2	Concrete Box Culverts Extensions	EA Extension	0	0		0	
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	
Strain Poles							
18.5	Steel Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.6	Concrete Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	
Mast Arms							
18.9	Mast Arms	EA Design	0	0		0	
18.10	Mast Arms Data Table Plan Sheets	Sheet	0	0	0	0	
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	
Overhead/Cantilever Sign Structures							
18.12	Cantilever Sign Structures	EA Design	0	0		0	
18.13	Overhead Span Sign Structures	EA Design	0	0		0	
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0		0	
18.15	Monotube Overhead Sign Structure	EA Design	0	0		0	
18.16	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0		0	
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	0	0	0	0	
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	0	0	0	0	
High Mast Lighting							
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0		0	
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	
Noise Barrier Walls (Ground Mount)							
18.21	Horizontal Wall Geometry	EA Wall	0	0		0	
18.22	Vertical Wall Geometry	EA Wall	0	0		0	
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	
18.24	Control Drawings	Sheet	0	0	0	0	
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0		0	
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0		0	
18.27	Aesthetic Details	LS	1	0		0	
Special Structures							

ATTACHMENT B

Project Activity 18: Miscellaneous Structures

18.28	Fender System	LS	1	0		0	
18.29	Fender System Access	LS	1	0		0	
18.30	Special Structures	LS	1	0		0	
18.31	Other Structures	LS	1	70		130	Redesign elevator tower foundations (north and south) based on revised locations, span 2 falsework design based on new location of pylon footing closer to the C-4 canal
18. Structures - Miscellaneous Total					0	130	

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
A&P CONSULTING TRANSPORTATION ENGINEERS (APCTE)
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
 County: Miami-Dade
 FPN: 434688-1-58-01
 FAP No.:

Consultant Name: APCTE Engineers
 Consultant No.:
 Date: 11/18/2016
 Estimator:

Staff Classification	Total Staff Hours From "SH Summary -	Project Manager	Project Engineer	Cadd Tech	Staff Classification 4	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$70.00	\$46.00	\$35.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	28	8	13	7	0	0	0	0	0	0	0	0	0	28	\$1,403	\$50.11
5. Roadway Plans	22	4	9	9	0	0	0	0	0	0	0	0	0	22	\$1,009	\$45.86
6. Drainage Analysis	9	2	5	2	0	0	0	0	0	0	0	0	0	9	\$440	\$48.89
7. Utilities	22	4	13	4	0	0	0	0	0	0	0	0	0	21	\$1,018	\$48.48
8. Environmental Permits, Compliance & Clearances	44	9	26	9	0	0	0	0	0	0	0	0	0	44	\$2,141	\$48.66
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	14	8	3	3	0	0	0	0	0	0	0	0	0	14	\$803	\$57.36
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	140	28	84	28	0	0	0	0	0	0	0	0	0	140	\$6,804	\$48.60
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	279	63	153	62	0	0	0	0	0	0	0	0	0	278		
Total Staff Cost		\$4,410.00	\$7,038.00	\$2,170.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$13,618.00	\$48.99

Check = \$13,618.00

Survey Field Days by Subconsultant
 4 - Person Crew:

SALARY RELATED COSTS:
 OVERHEAD: \$13,618.00
 OPERATING MARGIN: \$23,053.91
 FCCM (Facilities Capital Cost Money): \$2,042.70
 EXPENSES: \$3.81
 \$849.76
 4-man crew
 Survey (Field - if by Prime) 0 days @ \$ - / day \$0.00
SUBTOTAL ESTIMATED FEE: \$39,568.18
 Subconsultant: Enter Name Sub 1 \$0.00
SUBTOTAL ESTIMATED FEE: \$39,568.18
 Geotechnical Field and Lab Testing \$0.00
SUBTOTAL ESTIMATED FEE: \$39,568.18
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$39,568.18

Notes:

- This sheet to be used by Prime Consultant to calculate the Grand Total fee.
- Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Project Activity 4: Roadway Analysis

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	2	2	
4.2	Pavement Type Selection Report	LS	1	0	0	
4.3	Pavement Design Package	LS	1	0	0	
4.4	Cross-Slope Correction	LS	1	0	0	
4.5.1	Horizontal /Vertical Master Design Files	LS	1	12	12	
4.5.2	Horizontal /Vertical Master Design Files (skeletal plans)	LS	1	0	0	
4.6	Access Management	LS	1	0	0	
4.7	Cross Section Design Files	LS	1	0	0	
4.8	Traffic Control Analysis	LS	1	0	0	
4.9	Master TCP Design Files	LS	1	12	12	
4.10	Design Variations and Exceptions	LS	1	0	0	
4.11	Design Report	LS	1	0	0	
4.12	Quantities	LS	1	0	0	
4.13	Cost Estimate	LS	1	0	0	
4.14	Technical Special Provisions	LS	1	0	0	
4.15	Other Roadway Analysis	LS	1	0	0	
Roadway Analysis Technical Subtotal					26	
4.16	Field Reviews	LS	1	0	0	
4.17	Technical Meetings	LS	1	0	0	Meetings are listed below
4.18	Quality Assurance/Quality Control	LS	%	5%	1	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.19	Independent Peer Review	LS	%	0%	0	
4.20	Supervision	LS	%	5%	1	
Roadway Analysis Nontechnical Subtotal					2	
4.21	Coordination	LS	%	0%	0	
4. Roadway Analysis Total					28	

Technical Meetings

Typical Section	EA	0	0	0
Pavement	EA	0	0	0
Access Management	EA	0	0	0
15% Line and Grade	EA	0	0	0
Driveways	EA	0	0	0
Local Governments (cities, counties, MPO)	EA	0	0	0
Work Zone Traffic Control	EA	0	0	0
30/60/90/100% Comment Review Meetings	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0

Progress Meetings (if required by FDOT)	EA	0	0	0
Phase Review Meetings	EA	0	0	0

Total Meetings				0
-----------------------	--	--	--	----------

Carries to 4.17

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 5: Roadway Plans

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	0	
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	0	0	0	
5.3	Drainage Map (Including Interchanges)		Sheet	0	0	0	0	
5.4	Typical Section Sheets							
5.4.1	Typical Sections		EA	0	0		0	
5.4.2	Typical Section Details		EA	0	0		0	
5.5	General Notes/Pay Item Notes		Sheet	0	0	0	0	
5.6	Summary of Quantities		Sheet	0	0	0	0	
5.7	Box Culvert Data Sheet		Sheet	0	0	0	0	
5.8	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	
5.9	Summary of Drainage Structures		Sheet	0	0	0	0	
5.10	Optional Pipe/Culvert Material		Sheet	0	0	0	0	
5.11	Project Layout		Sheet	0	0	0	0	
5.12	Plan/Profile Sheet		Sheet	2	2	2	4	
5.13	Profile Sheet		Sheet	0	0	0	0	
5.14	Plan Sheet		Sheet	0	0	0	0	
5.15	Special Profile		Sheet	0	0	0	0	
5.16	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	0	
5.17	Interchange Layout Sheet		Sheet	0	0	0	0	
5.18	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.19	Intersection Layout Details		Sheet	0	0	0	0	
5.20	Special Details		EA	0	0		0	
5.21	Drainage Structure Sheet (Per Structure)		EA	2	2		4	Additional Drainage in North Plaza
5.22	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	
5.23	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	
5.24	Lateral Ditch Cross Sections		EA	0	0		0	
5.25	Retention/Detention Ponds Detail Sheet		Sheet	0	0	0	0	
5.26	Retention Pond Cross Sections		EA	0	0		0	
5.27	Cross-Section Pattern Sheet		Sheet	0	0	0	0	
5.28	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.29	Cross Sections		EA	0	0.25		0	
5.30	Temporary Traffic Control Plan Sheets		Sheet	0	6	0	0	
5.31	Temporary Traffic Control Cross Section Sheets		EA	0	0		0	
5.32	Temporary Traffic Control Detail Sheets		Sheet	1	12	1	12	
5.33	Utility Adjustment Sheets		Sheet	0	0	0	0	
5.34	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.35	Erosion Control Plan		Sheet	0	0	0	0	
5.36	SWPPP		Sheet	0	0	0	0	
5.37	Project Network Control Sheet		Sheet	0	0	0	0	
5.38	Environmental Detail Sheets		LS	0	0		0	
5.39	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal						3	20	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.40	Quality Assurance/Quality Control		LS	%	5%		1	
5.41	Supervision		LS	%	5%		1	
5. Roadway Plans Total						3	22	

Project Activity 6: Drainage Analysis

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Basin	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	0	0	0	
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6.7	Design of Flood Plain Compensation	Per Flood-plain Basin	0	0	0	
6.8	Design of Storm Drains	EA	4	2	8	Additional Drainage in North Plaza
6.9	Optional Culvert Material	LS	0	0	0	
6.10	French Drain Systems	Per Cell	0	0	0	
6.11	Drainage Wells	EA	0	0	0	
6.12	Drainage Design Documentation Report	LS	1	0	0	
6.13	Bridge Hydraulic Report	EA	0	0	0	
6.14	Temporary Drainage Analysis	LS	1	0	0	
6.15	Cost Estimate	LS	1	0	0	
6.16	Technical Special Provisions	LS	1	0	0	
6.17	Other Drainage Analysis	LS	1	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Drainage Analysis Technical Subtotal					8	
6.18	Field Reviews	LS	1	0	0	
6.19	Technical Meetings	LS	1	0	0	Meetings are listed below
6.20	Quality Assurance/Quality Control	LS	%	0%	0	
6.21	Independent Peer Review	LS	%	0%	0	
6.22	Supervision	LS	%	0%	0	
Drainage Analysis Nontechnical Subtotal					0	
6.23	Coordination	LS	%	10%	1	
6. Drainage Analysis Total					9	

Technical Meetings

Base Clearance Water Elevation	EA	0	0	0
Pond Siting	EA	0	0	0
Agency	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
FDOT Drainage	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings (if required by FDOT)	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				0

Carries to 6.19

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 7: Utilities

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	Meeting is listed below
7.2	Identify Existing UAO(s)	LS	1	1	1	1 UAO for additional coordination
7.3	Make Utility Contacts	LS	1	4	4	Transmittal of plans Documents to Utility Company
7.4	Exception Processing	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	Meeting is listed below
7.6	Individual/Field Meetings	LS	1	3	3	Meetings are listed below (2 hrs meeting duration + 1 hr meeting minutes) = 3 hrs
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	2	2	1 UAO x 2 hrs = 2 hrs
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	Meeting is listed below
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	2	2	1 UAO x 2 hrs = 2 hrs
7.11	Utility Coordination/Followup	LS	1	8	8	Follow up coordination with UAOs for proposed relocations
7.12	Utility Constructability Review	LS	1	2	2	1 UAO x 2 hrs = 2 hrs
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	1	0	0	
7.16	Certification/Close-Out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
7. Utilities Total					22	

Project Activity 7: Utilities**Technical Meetings**

Kickoff	EA	0	0	0	no
Preliminary Meeting	EA	0	0	0	
Individual UAO Meetings	EA	1	2	2	
Field Meetings	EA	0	0	0	
Design Meeting	EA	0	0	0	
Other Meetings	EA	0	0	0	
Total Technical Meetings		1		2	

Project Activity 8: Environmental Permits

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	Complete Permit Involvement Form	LS	1	0	0	
8.3	Field Work					
8.3.1	Pond Site Alternatives	LS	1	0	0	
8.3.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.3.3	Species Surveys	LS	1	0	0	
8.3.4	Archeological	LS	1	0	0	
8.4	Agency Verification of Wetland Data	LS	1	0	0	
8.5	Complete And Submit All Required Permit Applications					
8.5.1	Complete and Submit All Required Wetland Permit Applications	LS	1	0	0	
8.5.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.6	Prepare Dredge and Fill Sketches (as needed)	LS	1	16	16	
8.7	Prepare USCG Permit Sketches	LS	1	0	0	
8.8	Prepare Water Management District Right-of-Way Occupancy Sketches	LS	2	8	16	
8.9	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.10	Prepare Tree Permit Information	LS	1	0	0	
8.11	Mitigation Design	LS	1	0	0	
8.12	Mitigation Coordination and Meetings	LS	1	0	0	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.13	Other Environmental Permits	LS	1	8	8	USACE 404 Permit resubmittal & coordination
	Environmental Clearances/Reevaluations					
8.14	Technical support to Department for Environmental Clearances and Reevaluations					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Preparation of Environmental Clearances and Reevaluations					
8.15.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.15.2	Archaeological and Historical Features	LS	1	0	0	
8.15.3	Wetland Impact Analysis	LS	1	0	0	
8.15.4	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.15.5	Section 7 or Section 10 Consultation	LS	1	0	0	
8.16	Contamination Impact Analysis	LS	1	0	0	
8.17	Asbestos Survey	LS	1	0	0	
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					40	
8.18	Technical Meetings	LS	1	0	0	Meetings are listed below
8.19	Quality Assurance/Quality Control	LS	%	3%	1	
8.20	Supervision	LS	%	3%	1	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					2	
8.21	Coordination	LS	%	5%	2	
8. Environmental Permits, Compliance and Clearances Total					44	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
Technical Meetings						
	WMD	EA	0	0	0	
	NMFS	EA	0	0	0	
	ACOE	EA	0	0	0	
	USCG	EA	0	0	0	
	USFWS	EA	0	0	0	
	FFWCC	EA	0	0	0	
	FDOT	EA	0	0	0	
	Other Meetings	EA	0	0	0	
Subtotal Technical Meetings					0	
	Progress Meetings	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	
Total Meetings					0	

Carries to 8.18

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Key Sheet and Index of Drawings	Sheet	0	0	0	0					
9.2	Project Layout	Sheet	0	0	0	0					
9.3	General Notes and Bid Item Notes	Sheet	0	0	0	0					
9.4	Miscellaneous Common Details	Sheet	0	0	0	0					
9.5	Incorporate Report of Core Borings	Sheet	0	0	0	0					
9.6	Existing Bridge Plans	LS	0	0		0					
9.7	Assemble Plan Summary Boxes and Quantities	LS	0	0		0					
9.8	Cost Estimate	LS	0	0		0					
9.9	Technical Special Provisions	LS	0	0		0					
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					0	0					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	0	0	0	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
17	Retaining Walls	140								140	
18	Miscellaneous Structures	0									0
Structures Technical Subtotals		140	0	0	0	0	0	0	0	140	0
Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments					
9.10	Field Reviews	LS	1	0	0						

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

9.11	Technical Meetings	LS	1	0	0	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	%	5%	7	
9.13	Independent Peer Review	LS	1	0	0	
9.14	Supervision	LS	%	5%	7	
Structures Nontechnical Subtotal					14	
9.15	Coordination	LS	1	0	0	
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					14	

Technical Meetings

BDR Coordination/Review	EA	0	0	0
90/100% Comment Review	EA	0	0	0
Aesthetics Coordination	EA	0	0	0
Regulatory Agency	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Utility Companies	EA	0	0	0
Other Meetings	EA	0	0	0

Subtotal Technical Meetings				0
------------------------------------	--	--	--	----------

Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0

Total Meetings				0
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Carries to 9.11

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3.

Project Activity 17: Retaining Walls

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirements						
17.1	Key Sheet	Sheet	0	0	0	0	
17.2	Horizontal Wall Geometry	Per Wall	0	0		0	
	Permanent Proprietary Walls						
17.3	Vertical Wall Geometry	Per Wall	0	0		0	
17.4	Semi-Standard Drawings	Sheet	0	0	0	0	
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.6	Details	Sheet	0	0	0	0	
	Temporary Proprietary Walls						
17.7	Vertical Wall Geometry	Per Wall	0	0		0	
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.10	Details	Sheet	0	0	0	0	
	Cast-in-Place Retaining Walls						
17.11	Design	EA Design	0	0		0	
17.12	Vertical Wall Geometry	EA Wall	0	0		0	
17.13	General Notes	Sheet	0	0	0	0	
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.15	Sections and Details	Sheet	0	0	0	0	
17.16	Reinforcing Bar List	Sheet	0	0	0	0	

Project Activity 17: Retaining Walls

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Other Retaining Walls and Bulkheads						
17.17	Design	EA Design	1	80		80	Update Temp. Wall (deeper excavation) and Permanent wall Designs (new location of adjacent footings). Design new Wall along south bank (40 hrs).
17.18	Vertical Wall Geometry	EA Wall	1	4		4	New Wall along south bank.
17.19	General Notes, Tables and Misc. Details	Sheet	1	4	1	4	Update Temp. Wall Installation Table
17.20	Wall Plan and Elevations	Sheet	4	12	4	48	North Bank Wall: Update sheets BW-4, BW-8 and BW-11. South Bank Wall: Develop new Plan & Elevation sheet (24 hrs).
17.21	Details	Sheet	1	4	1	4	Update Temp. Wall (new location)
17. Structures - Retaining Walls Total					6	140	

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
 County: Miami-Dade
 FPN: 434688-1-58-01
 FAP No.:

Consultant Name: APCTE Engineers
 Consultant No.:
 Date: 11/22/2016
 Estimator:

Staff Classification	Total Staff Hours From "SH Summary -	Project Manager	Project Engineer	Cadd Tech	Staff Classification 4	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$70.00	\$46.00	\$35.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	128	26	51	51	0	0	0	0	0	0	0	0	0	128	\$5,951	\$46.49
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	128	26	51	51	0	0	0	0	0	0	0	0	0	128		
Total Staff Cost		\$1,820.00	\$2,346.00	\$1,785.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$5,951.00	\$46.49

Survey Field Days by Subconsultant
 4 - Person Crew:

Notes:

- This sheet to be used by Prime Consultant to calculate the Grand Total fee.
- Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:

OVERHEAD: 169% \$5,951.00
 OPERATING MARGIN: 15% \$10,074.45
 FCCM (Facilities Capital Cost Money): 0.03% \$892.65
 EXPENSES: 6.24% \$1.67
 \$371.34

Survey (Field - if by Prime) 0 4-man crew days @ \$ - / day \$0.00
SUBTOTAL ESTIMATED FEE: \$17,291.11
SUBTOTAL ESTIMATED FEE: \$17,291.11
 Geotechnical Field and Lab Testing \$0.00
SUBTOTAL ESTIMATED FEE: \$17,291.11
 Optional Services \$0.00
GRAND TOTAL ESTIMATED FEE: \$17,291.11

Check = \$5,951.00

ATTACHMENT B

Project Activity 7: Utilities

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Coordination Meeting	LS	1	8	8	
7.2	Water Main Relocation Plans	LS	1	40	40	
7.3	Sewer Relocation Plans	LS	1	32	32	
7.4	Permits	LS	1	24	24	
7.5	Post Design Services	LS	1	24	24	
7.6	Individual/Field Meetings	LS	1	0	0	
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	0	0	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	Meeting is listed below
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	0	0	
7.11	Utility Coordination/Followup	LS	1	0	0	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	1	0	0	
7.16	Certification/Close-Out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
7. Utilities Total					128	

ATTACHMENT B

Project Activity 7: Utilities

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff (see 7.1)	EA	0	0	0		0
Preliminary Meeting (see 7.5)	EA	0	0	0		0
Individual UAO Meetings (see 7.6)	EA	0	0	0		0
Field Meetings (see 7.6)	EA	0	0	0		0
Design Meeting (see 7.9)	EA	0	0	0		0
Other Meetings (<i>this is automatically added into Utilities Total (cell F27)</i>)	EA	0	0	0		0
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to Tab 3

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
MILLER LEGG
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904



November 14, 2016

Via E-mail ddempsey@figgbridge.com

Dwight D. Dempsey, P.E., S.E.
Regional Director
Southeastern Regional Office
FIGG Bridge Engineers, Inc.
424 N. Calhoun St.
Tallahassee, FL 32301

**Re: FIU University City Pedestrian Bridge Landscape Architectural Services
(the "Project")
Miller Legg Project No.14-DB007
Additional Service No. 1 – Landscape Architecture Revisions due to Bridge
Shift**

Dear Dwight:

Per your request and the 11' shifting of the bridge, we have prepared the attached Additional Services Agreement for the landscape architecture revisions on the FIU Pedestrian Bridge Project.

Please have an authorized Client signatory sign and initial the attached Agreement and Exhibit A pages where indicated and return for Miller Legg's execution. A fully-executed copy will be emailed to you for your file.

Should you have any questions, please do not hesitate to contact me at (954) 628-3651, or mkroll@millerlegg.com. Again, thank you for this opportunity, and we look forward to working with you on this Project.

Very truly yours,

A handwritten signature in blue ink, appearing to read "MKroll", enclosed within a light blue oval.

Michael D. Kroll, RLA, FASLA
President

MDK/mch
Attachments

V:\Projects\2014\14-DB007 - FIU University City Ped Bridge\Documents\Contracts\AS 1 11' Bridge shift\AS 1 Agreement.docx

IMPROVING COMMUNITIES. CREATING ENVIRONMENTS.

South Florida Office: 5747 N Andrews Way • Fort Lauderdale, Florida 33309-2364
(954) 436-7000 • Fax: (954) 493-6539

www.millerlegg.com
Page B34 of 77

ADDITIONAL SERVICE AGREEMENT FOR PROFESSIONAL SERVICES

Client: FIGG Bridge Engineers, Inc. **Client Representative:** Dwight D. Dempsey, P.E., S.E.
424 N. Calhoun St. **Address:** Same
Tallahassee, FL 32301 **Address:** Same
Phone /Fax: _____ **Email:** ihosmer@aol.com

Date: November 14, 2016 **Project No.** 14-DB007 **T:** -- **R:** -- **S:** --

Project Name and Location: FIU University City Pedestrian Bridge Landscape Architectural Services (the "Project")
Additional Service No. 1 – Landscape Architecture Revisions due to Bridge Shift

Description of Services to be Provided: See Exhibit A

Fee: Lump Sum of \$ 5,684.00

Retainer: (Payable upon execution of this Agreement) \$ N/A

Special Conditions: N/A

Notice to Owner: Is the Client the Owner of the Property? ☐ Yes ☒ No
 If "No", Owner's name and address: Florida International University

The undersigned agree that these Additional Services shall be in compliance with the Agreement, General Conditions and Special Provisions dated May 6, 2016. Any additional requested services will be addressed in a separate agreement.

Miller, Legg & Associates, Inc. d/b/a Miller Legg
(Consultant)

FIGG Bridge Engineers, Inc. (Client)

Signature Date: _____

Signature Date: _____

Michael Kroll, RLA, FASLA, President
Printed Name/Title

Printed Name/Title

MDK/mch

Attachment: Exhibits A and B



EXHIBIT A –SCOPE OF SERVICES
FIU University City Pedestrian Bridge Landscape Architectural Services
(the “Project”)
Additional Service No. 1 – Landscape Architecture Revisions due to Bridge Shift

1.0 PROJECT DESCRIPTION

- 1.1** The Project is generally described as follows: **Consultant shall provide Landscape Architectural revisions and services for the FIU University City Pedestrian Bridge Project in Sweetwater, Florida.**

2.0 BASIS OF SCOPE

This scope was prepared based upon the November 10, 2015 Client email requesting landscape, irrigation and hardscape drawing revisions prepared by Consultant, responding to a 11' shift in the bridge design. Consultant reserves the right to amend this scope should the proposed plans change.

- Design submittals are limited to 100% CDs and Released for Construction (RFC) only. Any additional submittals will be provided as an additional service.
- Fee is outlined in the attached Exhibit B Staff Hour Estimate form

3.0 INFORMATION TO BE PROVIDED BY CLIENT

- 3.1** Authorization from Owner shall be provided as necessary to enter the project site as required to conduct the scope of services.
- 3.2** Base plans and existing condition survey information.
- 3.3** All electrical/structural design required for irrigation design shall be provided by Owner's Consultants.
- 3.4** Copies of all relevant data, including correspondence, reports, plans or information in its possession which may be beneficial to the work effort performed by the Consultant.
- 3.5** Filing and application fees, permit review fees, impact fees or other associated assessments by other agencies.
- 3.6** Complete topographic, tree and boundary survey data in electronic format.
- 3.7** Complete subsurface utility locations and designations for the project site and surrounding areas as required for design services.
- 3.8** Any structural, electrical or mechanical designs required for Consultant's services.

4.0 SCOPE OF BASIC SERVICES AND FEE

The scope of services to be provided by Consultant shall be divided into the following tasks:

Task 1 Landscape Construction Documents - Consultant shall prepare revised landscape construction documents based on the November 10, 2016 bridge shift. These drawings shall include plans, details, quantities, notes and size specifications for the installation of the proposed landscaping.

- Consultant shall make the following CD submittals and attend up to one (1) CD Review meetings as follows:
- 100% Contract Documents submittal/review

Upon completion of 100% Review Comments, Consultant shall submit one (1) Ready for Construction (RFC) set to Client.

Task 2 Hardscape/Site Amenity Construction Documents - Consultant shall prepare revised hardscape construction documents based on the November 10, 2016 bridge shift. These drawings shall include plans, details, quantities, notes and size specifications for the installation of the proposed pedestrian hardscape areas and site amenities.

- Consultant shall make the following CD submittals and attend up to one (1) CD Review meetings as follows:
- 100% Contract Documents submittal/review

Upon completion of 100% Review Comments, Consultant shall submit one (1) Ready for Construction (RFC) set to Client.

Task 3 Irrigation Construction Documents - Consultant shall prepare irrigation construction documents based on the November 10, 2016 bridge shift. These drawings shall include plans, details, quantities, notes and size specifications for the installation of the proposed landscaping. The irrigation will utilize the existing on-campus FIU irrigation system or a potable City of Sweetwater municipal system as the point of connection.

- Consultant shall make the following CD submittals and attend up to one (1) CD Review meetings as follows:
- 100% Contract Documents submittal/review

Upon completion of 100% Review Comments, Consultant shall submit one (1) Ready for Construction (RFC) set to Client.

Task 4 Owner and Agency Reviews/Permitting – Consultant shall provide Client the digital landscape, hardscape/site amenity and irrigation construction documents, permit applications and support data for submittal to FIU, the City of Sweetwater and appropriate permitting agencies. Consultant shall attend up to one (1) permit pre-application, review and/or coordination meetings as part of this task. Consultant shall address agency comments and RFIs associated with landscape, hardscape and irrigation related items.

V:\Projects\2014\14-DB007 - FIU University City Ped Bridge\Documents\Contracts\AS 1 11' Bridge shift\AS1 Exhibit A.docx

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation
 County: Miami-Dade
 FPN: 434688-1-58-01
 FAP No.: 54321

Consultant Name: Miller Legg
 Consultant No.:
 Date: 11/18/2016
 Estimator:

Staff Classification	Total Staff Hours From "SH Summary Firm"	Sr LA	LA	Staff Classification 3	Staff Classification 4	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$45.00	\$26.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	50	8	43	0	0	0	0	0	0	0	0	0	0	51	\$1,478	\$28.98
26. Landscape Architecture Plans	14	1	13	0	0	0	0	0	0	0	0	0	0	14	\$383	\$27.36
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	64	9	56	0	0	0	0	0	0	0	0	0	0	65		
Total Staff Cost		\$405.00	\$1,456.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,861.00	\$28.63

Check = \$1,861.00

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:		\$1,861.00
OVERHEAD:	176%	\$3,266.99
OPERATING MARGIN:	27%	\$502.47
FCCM (Facilities Capital Cost Money):	0.06%	\$1.19
EXPENSES:	2.84%	\$52.85
SUBTOTAL ESTIMATED FEE:		\$5,684.50
Survey (Field)	0	\$0.00
Geotechnical Field and Lab Testing	4-man crew da \$ - / day	\$0.00
SUBTOTAL ESTIMATED FEE:		\$5,684.50
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$5,684.50

ATTACHMENT B

25. Landscape Arch. Analysis

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Miller Legg		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
25.1	Data Collection	LS	1	4	4	Base plan revisions and utility avoidance (south plaza 2 hours, north plaza 21 hour)
25.2	Site Inventory and Analysis	LS	1	0	0	
25.3	Planting Design	LS	1	10	10	Final and RFC design revisions (South Plaza 6 hrs, North Plaza 4 hrs)
25.4	Irrigation Design	LS	1	8	8	Final and RFC design revisions (South Plaza 4 hrs, North Plaza 4 hrs)
25.5	Hardscape Design	LS	1	10	10	Final and RFC design revisions (South Plaza 6 hrs, North Plaza 4 hrs)
25.6	Plan Summary Boxes	LS	1	0	0	
25.7	Cost Estimates	LS	1	3	3	1 update
25.8	Technical Specification Provisions	LS	1	0	0	
25.9	Other Landscape Architecture	LS	1	0	0	
Landscape Architecture Analysis Technical Subtotal					35	
25.10	Outdoor Advertising	LS	1	0	0	
25.11	Field Reviews	LS	1	0	0	
25.12	Technical Meetings / Public Meetings	LS	1	10	10	Meetings are listed below
25.13	Quality Assurance/Quality Control	LS	%	7%	2	
25.14	Independent Peer Review	LS	%	0%	0	
25.15	Supervision	LS	%	2%	1	
Landscape Architecture Analysis Nontechnical Subtotal					13	
25.16	Project Coordination	LS	%	2%	1	
25.17	Interdisciplinary Coordination	LS	%	2%	1	
25. Landscape Analysis Total					50	

ATTACHMENT B

25. Landscape Arch. Analysis

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT (kickoff, concept review)	EA	0	0	0		0
Maintaining Agency (cities, counties)	EA	2	2	4	yes	0
Utility Owners	EA	0	0	0		0
Local Agency for Tree Removal	EA	1	2	2	no	0
Local Citizen Group(s)	EA	0	0	0		0
Other Meetings	EA	0	4	0	yes	0
Subtotal Technical Meetings				6	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	- -
Phase Review Meetings	EA	2	2	4	PM attendance at Phase Review Meetings is manually entered on General Task 3	- -
Total Meetings				10	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 25.12

Carries to Tab 3

ATTACHMENT B

26. Landscape Arch. Plans

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Miller Legg		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
26.1	Key Sheet		Sheet	0	0	0	0	
26.2	Tabulation of Quantities		Sheet	0	0	0	0	
26.3	General Notes		Sheet	0	0	0	0	
26.4	Tree and Vegetation Inventory, Protection and Relocation Plans		Sheet	0	0	0	0	
26.5	Planting Plans For Linear Roadway Projects		Sheet	0	0	0	0	
26.6	Planting Plans (Interchanges and Toll Plazas)		Sheet	1	3	1	3	1 plan sheet
26.7	Planting Details and Notes		Sheet	1	2	1	2	1 detail sheet
26.8	Irrigation Plans for Linear Roadway Project		Sheet	0	0	0	0	
26.9	Irrigation Plans for Interchange and Toll Plazas		Sheet	1	3	1	3	1 plan sheet
26.10	Irrigation Details and Notes		Sheet	1	1	1	1	1 detail sheet
26.11	Hardscape Plans		Sheet	1	3	1	3	1 plan sheet
26.12	Hardscape Details and Notes		Sheet	1	1	1	1	1 detail sheet
26.13	Maintenance Plan		Sheet	0	0	0	0	
26.14	Cost Estimate		LS	1	0		0	
Landscape Architecture Plans Technical Hours Subtotal						6	13	
26.15	Quality Assurance/Quality Control		LS	%	7%		1	
26.16	Supervision		LS	%	2%		0	
26. Landscape Architecture Plans Total						6	14	

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
GEOSOL
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904

FIGG Bridge Engineers, Inc.
424 North Calhoun Street
Tallahassee, Florida 32301

November 15 , 2016

Attention: Mr. Dwight D. Dempsey, P.E., S.E.

Re: Technical Proposals for Supplemental Geotechnical Services for Design Phase
Proposed Pedestrian Bridge over SW 8th Street and the C-4 Canal
Canal Bulkhead Containment Wall at Florida International University
Miami-Dade County, Florida
GEOSOL Proposal No. P-215205-SS

Dear Mr. Dempsey:

In accordance with your request on November 10, 2016, Geosol, Inc., (GEOSOL) is pleased to submit this proposal pertaining to supplemental geotechnical services for the above-referenced project. Included herein is an estimate of the work effort and our anticipated approach, based on our understanding of the project.

INTRODUCTION

As we understand it, this project consists of the design and construction of a new pedestrian bridge crossing over SW 8th Street and the C-4 Canal at Florida International University (FIU). The proposed pedestrian bridge will be located on the west side of the intersection of SW 8th Street and SW 109th Avenue, and will serve as a critical piece of infrastructure to allow safe student transit across one of the region's busiest highways. The proposed pedestrian bridge will be a 2-span bridge with an overall length of about 250 feet. As we understand it, the proposed pedestrian bridge will be supported by three (3) piers; Pier 1 (south of SW 8th Street), Pier 2 (between SW 8th Street and the C-4 canal), and Pier 3 (north of the C-4 canal). Additionally, we understand that the project includes the design and construction of a canal bulkhead containment wall along the northern bank of the C-4 canal. GEOSOL previously prepared and submitted a *Final Report of Subsurface Exploration and Foundation Evaluations for Proposed Signature Pedestrian-Oriented-Shared Use Bridge and Associated Canal Bulkhead Containment Wall* dated October 21, 2016. The referenced geotechnical report recommended the use of spread footings for piers 1 and 3, and 24-inch driven pile foundations for Pier 2. A re-evaluation of foundation types will be required as part of these supplemental services.

As we understand it, the proposed pedestrian bridge will need to be shifted about 11-feet to the north to accommodate Miami-Dade Transit (MDT) bus lanes and as a result would require the design and construction of a canal bulkhead containment wall along the southern bank of the C-4 canal. The end bent location on the south side (at begin bridge station) will need to be designed for vehicular collision now that it will be shifted closer to the roadway. As such, the use of spread footing foundations for Pier 1 does not appear to be feasible from an external and global stability standpoint, and other foundation alternatives, i.e. driven piles, need to be evaluated. Also, initial and preliminary reviews show that this will cause an increase in the size of the pier column from a 5' x 2' section to a 5' x 3' section. The foundation loads will be updated and the foundation sizes may need to be resized, and will need to be coordinated and documented in the geotechnical report. Since end bent at the south and north ends of the bridge are of similar aesthetics, the north end bent location will need to be updated. Additionally, Pier 3 may also require the use of driven piles and possibly eliminating the bulkhead deadman anchor system.



5795-A N.W. 151st Street
Miami Lakes, FL 33014
Phone (305) 828-4367; Fax (305) 828-4235
E-mail: geosolusa@bellsouth.net
Page B43 of 77

FIGG Bridge Engineers, Inc.

Technical Proposals for Supplemental Geotechnical Services for Design Phase

Proposed Pedestrian Bridge over SW 8th Street and the C-4 Canal**Canal Bulkhead Containment Walls at Florida International University**

Miami-Dade County, Florida

GEOSOL Proposal No. P-215205-SS

As the pylon foundation is being lowered several feet, coordination may be needed for updating the temporary wall design by APCTE. As requested, this technical proposal for supplemental geotechnical services pertains to the services required due to the above-referenced changes to the proposed pedestrian bridge and associated bulkhead walls.

Also, as we understand it, geotechnical services will be required for the proposed staging area to the west of Pier 1 that will be used to precast Span 1 of the proposed pedestrian bridge.

The supplemental geotechnical services will be performed in general accordance with the Florida Department of Transportation (FDOT) Soils and Foundations Handbook (2016), the project's Scope of Services and to meet the criteria outlined in the Request for Proposal (RFP) documents. The supplemental geotechnical services during the design phase will be required in order to explore the subsurface conditions in areas of the proposed pedestrian bridge and bulkhead walls, and will include supplemental field exploration and laboratory testing programs well as supplemental geotechnical engineering recommendations for use in foundation design. **Geotechnical services that will be required for the construction phase 1 is not part of this supplemental scope or fee proposal. The previously provided scope and fees for the construction phase will need to be updated to include driven piles for Piers 1 and 3 as previously discussed.**

SCOPE OF SERVICES FOR DESIGN PHASE

After receiving authorization for our services, we will proceed with the execution of the field exploration programs as well as geotechnical engineering evaluations for the design phase. The field exploration testing program will generally consist of providing the following services:

Field Exploration and Laboratory Testing Programs

1. Perform site reconnaissance, locate and coordinate for utilities that may interfere with the drilling operations.
2. Obtain Lane Closure Permits from FDOT Traffic Operations for borings located within FDOT Right of Way.
3. Perform a supplemental program of Standard Penetration Test (SPT) borings for the proposed bulkhead wall along the southern edge of the C-4 Canal. A total of two (2) SPT borings will be performed to a depth of 50 feet below existing grade. All SPT borings will be performed in accordance with ASTM D-1586.
4. Perform Standard Penetration Test (SPT) borings for the proposed staging area to the west of Pier 1. A total of two (2) SPT borings will be performed to a depth of 30 feet below existing grade. All SPT borings will be performed in accordance with ASTM D-1586.



FIGG Bridge Engineers, Inc.

Technical Proposals for Supplemental Geotechnical Services for Design Phase

Proposed Pedestrian Bridge over SW 8th Street and the C-4 Canal**Canal Bulkhead Containment Walls at Florida International University**

Miami-Dade County, Florida

GEOSOL Proposal No. P-215205-SS

5. Perform borehole exfiltration testing at two (2) locations for use in drainage evaluations and design. Borehole exfiltration testing will be performed at depths of 10, 15 and 20 feet below existing grades. The testing will be performed in accordance with the South Florida Water Management District's Usual Open-Hole testing procedures.
6. Visually examine all recovered soil/rock samples in the laboratory. A geotechnical engineer will examine all recovered soil and rock samples to develop a soil legend for the proposed project using the Unified Soil Classification System (USCS). The visual classification will be conducted in accordance with applicable ASTM standards. The laboratory testing program will consist of moisture content, percent passing the #200 sieve, grain-size analysis, organic content, and environmental classification testing.

For location of our borings, we will utilize plans provided by FIGG Bridge Engineers, Inc. to locate the boring locations in the field. We also assume that surveyors will verify the boring elevations and locations after they have been performed or that you will provide topographic cross-sections to allow interpolation of elevations.

Traffic Control

The work will be coordinated to minimize the amount of traffic disruption. Barricades, signs, cones and off-duty police officers will be used in accordance with Index 600 Series of the FDOT Roadway and Traffic Design Standards to allow for continuous traffic flow. The traffic control will meet the requirements of the FDOT District 6 Traffic Operations.

Geotechnical Engineering Evaluations and Recommendations

The data will be used in performing geotechnical engineering evaluations and developing foundation recommendations in the following areas:

1. Provide results of supplemental subsurface conditions and laboratory testing at the boring locations. These results will be summarized in the form of Report of Core Boring Sheets.
2. Discussion of some critical design or construction considerations based on the subsurface and groundwater conditions developed from the test borings.
3. Perform foundation analyses for the proposed pedestrian bridge structure. The analyses for the new bridge will include axial and lateral load capacity predictions and settlement estimates of spread footings and driven pile foundations. We will also perform wall analyses to determine penetration depths and lateral deflections for the proposed bulkhead containment wall along the southern edge of the C-4 Canal. We will also perform analyses and provide site preparation recommendations for the proposed staging area to the west of Pier 1. All geotechnical analyses will be performed with FDOT approved software.



FIGG Bridge Engineers, Inc.

Technical Proposals for Supplemental Geotechnical Services for Design Phase

Proposed Pedestrian Bridge over SW 8th Street and the C-4 Canal

Canal Bulkhead Containment Walls at Florida International University

Miami-Dade County, Florida

GEOSOL Proposal No. P-215205-SS

Geotechnical Report

A supplemental geotechnical report for the proposed pedestrian bridge and canal bulkhead containment wall structures will be prepared for this study to summarize the course of the study pursued and for support of the design plans. The report will be prepared using the results of the field investigations, laboratory testing and will contain geotechnical analyses, foundation recommendations for design and construction of the proposed structures previously described. The report will also include pile installation criteria, FHWA checklist, and report limitations.

Schedule for Design Phase

Our study can begin within one (1) day upon your notice to proceed. We will begin by calling SunShine One Call Services to have underground utilities marked and cleared and obtaining the required maintenance of traffic permits. These tasks typically take about ten (10) working days and can be performed simultaneously. Given the scope described herein, we can complete the field study within three (3) working days. The laboratory testing program will take an additional five (5) working days. We will then submit a written geotechnical engineering report within ten (10) working days following the completion of the laboratory testing. Assuming that we will be allowed to perform the study as a fairly continuous effort, we suggest assuming 29 working days for our work. However, we will pledge our corporate resources to expedite the project schedule as much as possible.

FEES

Based on our understanding of the project and the requested scope of services, we are willing to perform the supplemental field exploration and laboratory testing, to provide the supplemental geotechnical engineering evaluations and recommendations, and prepare the supplemental geotechnical report for the design phase of this project for a total of **\$31,145.00.**

If this proposal is satisfactory, kindly indicate so by signing and returning the Acceptance Sheet of Geotechnical Services Section below. Should the proposal require any clarification or amplification, please contact us. Payment for our services is required within 30 days from invoice date.

Sincerely,

GEOSOL, INC.



Oracio Riccobono, P.E.

Senior Geotechnical Engineer/ President

cc: Addressee (1); File (1)



FIGG Bridge Engineers, Inc.

Technical Proposals for Supplemental Geotechnical Services for Design Phase

Proposed Pedestrian Bridge over SW 8th Street and the C-4 Canal

Canal Bulkhead Containment Walls at Florida International University

Miami-Dade County, Florida

GEOSOL Proposal No. P-215205-SS

ACCEPTANCE SHEET OF GEOTECHNICAL SERVICES

ACCEPTED THIS _____ DAY OF _____, 2016

BY: _____

PLEASE PRINT NAME: _____

TITLE: _____

FIRM: _____



GEOSOL, INC.**GEOTECHNICAL FEE PROPOSAL - SUPPLEMENTAL SERVICES - DESIGN PHASE**

for Proposed Pedestrian Bridge over SW 8th Street at Florida International University (FIU)
Miami-Dade County

BRIDGE AND BULKHEAD WALL ALONG SOUTHSIDE OF THE TAMiami CANAL

GEOSOL PROPOSAL No.: P-215205-SS

DATE PREPARED: NOVEMBER 15, 2016

DESCRIPTION	UNITS	# OF UNITS	UNIT RATE (\$)	TOTAL \$
1) MOBILIZATION/DEMOBILIZATION AND FIELD ACTIVITIES				
Mobilize Equipment - Truck Mounted Drill Rig	each	1.0	\$350.00	\$350.00
Traffic Control, Off-Duty Policeman - 3 days & 8 hrs/day	hour	24.0	\$55.00	\$1,320.00
Cones, Signs, Barricades	day	3.0	\$225.00	\$675.00
Arrow Board - Assume 2 days	day	3.0	\$150.00	\$450.00

TOTAL FOR MOBILIZATION/DEMOBILIZATION & FIELD ACTIVITIES**\$2,795.00****2) STRUCTURAL BORINGS AND BOREHOLE EXFILTRATION TESTING***2 Borings to 50' for Proposed Bulkhead Wall, 2 Boring to 30' for Staging Area, and 2 Borehole Exfiltration Tests*

SPT Borings - 0 to 50 feet deep	feet	160.0	\$11.50	\$1,840.00
Grout Seal Boreholes (3-inch diameter) - LAND 0 to 50 feet deep	feet	160.0	\$4.50	\$720.00
Casing Allowance (3-inch diameter) - LAND 0 to 50 feet deep	feet	160.0	\$6.50	\$1,040.00
Borehole Exfiltration Testing at Depths of 10, 15, and 20 feet	each	2.0	\$900.00	\$1,800.00

SUB-TOTAL (PEDESTRIAN BRIDGE)**\$5,400.00****TOTAL FIELD INVESTIGATION****\$8,195.00****3) LABORATORY PROGRAM**

Natural Moisture Test	each	6.0	\$10.00	\$60.00
Grain Size Analysis - Full Sieve	each	4.0	\$45.00	\$180.00
Fine Content Determination - Single Sieve (-200 Sieve)	each	4.0	\$25.00	\$100.00
Organic Content Test	each	2.0	\$35.00	\$70.00

TOTAL LABORATORY PROGRAM**\$410.00****TOTAL FIELD AND LABORATORY PROGRAM****\$8,605.00****4) SUMMARY OF ENGINEERING AND TECHNICAL SERVICES****(SEE ATTACHED FDOT SPREADSHEET FOR STAFF-HOUR BREAKDOWN)**

Senior Engineer	hours	40	\$160.00	\$6,400.00
Project Engineer	hours	98	\$120.00	\$11,760.00
Engineering Intern	hours	20	\$85.00	\$1,700.00
Senior Engineer Technician	hours	12	\$75.00	\$900.00
Engineering Technician	hours	18	\$65.00	\$1,170.00
CADD Technician	hours	6	\$65.00	\$390.00
Secretary/Clerical	hours	4	\$55.00	\$220.00

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TOTAL ENGINEERING SERVICES**\$22,540.00****TOTAL GEOTECHNICAL DESIGN FEES FOR BRIDGES (EXCLUD. CONSTR. SERVICES)****\$31,145.00**

ATTACHMENT B

35. Geotechnical

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Pedestrian Bridge Relocation

434688-1-58-01

Prepared: 11/15/2016

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name	GEOSOL, INC.	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	1	4	4	
35.2	Develop Detailed Boring Location Plan	LS	1	1	1	Includes Total of 2 borehole exfiltration testing locations at depths of 10, 15, and 20
35.3	Stake Borings/Utility Clearance	Boring	2	2	4	Includes Total of 2 borehole exfiltration testing locations at depths of 10, 15, and 20
35.4	Muck Probing	Crew Day	0	0	0	
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	
35.6	Drilling Access Permits	Location	0	0	0	
35.7	Property Clearances	EA	0	0	0	
35.8	Groundwater Monitoring	EA	0	0	0	
35.9	LBR/Resilient Modulus Sampling	EA	0	0	0	
35.10	Coordination of Field Work	100 lf of boring	0.4	2	1	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	0	0	0	
35.12	Design LBR	LS	0	0	0	
35.13	Laboratory Data	100 lf of boring	0	0	0	
35.14	Seasonal High Water Table	Boring	0	0	0	
35.15	Parameters for Water Retention Areas	EA	2	2	4	For data reduction related to exfiltration testing
35.16	Delineate Limits of Unsuitable Material	Cross-section	0	0	0	
35.17	Electronic Files for Cross-Sections	100 lf of boring	0	0	0	
35.18	Embankment Settlement and Stability	Embankment Boring	2	4	8	For slope stability analysis along South Side of the C-4 Canal related to bridge falsework.
35.19	Monitor Existing Structures	LS	0	0	0	

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	
35.21	Geotechnical Recommendations	LS	0	0	0	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	0	0	0	
35.23	Preliminary Roadway Report	LS	0	0	0	
35.24	Final Report	EA	0	0	0	
35.25	Auger Boring Drafting	100 lf boring	0	0	0	
35.26	SPT Boring Drafting	100 lf boring	0	0	0	
Roadway Geotechnical Subtotal					22	
	Structures					
35.27	Develop Detailed Boring Location Plan	LS	1	2	2	Includes Total of 2 borings to 50' for Proposed Bulkhead Wall along South Side of the C-4 Canal and 2 borings to 30' for Staging area
35.28	Stake Borings/Utility Clearance	Boring	4	2	8	Includes Total of 2 borings to 50' for Proposed Bulkhead Wall along South Side of the C-4 Canal and 2 borings to 30' for Staging area
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	1	4	4	For bulkhead borings and borehole exfiltration testing
35.30	Drilling Access Permits	Location	0	0	0	
35.31	Property Clearances	EA	0	0	0	
35.32	Collection of Corrosion Samples	EA	0	0	0	
35.33	Coordination of Field Work	100 lf of boring	1.6	2	3	Includes Total of 2 borings to 50' for Proposed Bulkhead Wall along South Side of the C-4 Canal and 2 borings to 30' for Staging area
35.34	Soil and Rock Classification - Structures	100 lf of boring	1.6	2	3	
35.35	Tabulation of Laboratory Data	100 lf of boring	1.6	1	2	
35.36	Estimate Design Groundwater Level for Structures	EA	0	0	0	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	3	3	9	For re-evaluation of bridge foundations
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	3	6	18	For re-evaluation of bridge foundations
35.39	Bridge Construction and Testing Recommendations	Bridge boring	3	1	3	For re-evaluation of bridge foundations
35.40	Lateral Load Analysis (Optional)	Bridge boring	3	4	12	For re-evaluation of bridge foundations
35.41	Walls	Wall Boring	0	0	0	
35.42	Sheet Pile Wall Analysis	Wall Boring	2	6	12	For independent analysis and checking of bulkhead analysis by APCTE for the proposed Bulkhead Wall along South Side of the C-4 Canal
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	2	4	8	For staging area site preparation evaluation and analysis

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	0	0	
35.45	Preliminary Report - BDR	EA	0	0	0	
35.46	Final Report - Bridge and Associated Walls	EA	1	24	24	
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	0	0	0	
35.48	SPT Boring Drafting	100 lf of boring	1.6	6	10	
35.49	Other Geotechnical	LS	1	18	18	Engineering Technician to Set-up and Pick-up MOT devices for 3 days @ 6 hours per day
Structural Geotechnical Subtotal					136	
Geotechnical Technical Subtotal					158	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	1	4	4	
35.52	Technical Meetings	LS	1	20	20	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	3%	5	
35.54	Supervision	LS	%	3%	5	
Geotechnical Nontechnical Subtotal					34	
35.55	Coordination	LS	%	3%	6	
35. Geotechnical Total					198	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	1	4	4		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	2	4	8		0
Other Meetings	EA	2	4	8		0
Subtotal Technical Meetings				20	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3	--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3	--
Total Meetings				20	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 33.18

Carries to Tab 3

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
RANDY BURKETT LIGHTING DESIGN (RBLDI)
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904

RANDY
BURKETT
LIGHTING
DESIGN

November 15, 2016

Mr. Dwight Dempsey
Figg
424 North Calhoun Street
Tallahassee, Florida 32301

RE: Additional Service Request
FIU UCPP – Bridge Shift

Dwight,

As requested, we have developed a scope, fee estimate and schedule for the proposed FIU UCPP Bridge Shift. Based upon the information provided, we suggest the following scope of work:

1. South Plaza redesign/relayout
2. North Plaza redesign/relayout
3. Modifications to the bridge as necessary due to shift

Fee Estimate

The fee, based upon the attached FDOT schedule, is estimated at \$6,600.00.

Schedule

As our work is dependent upon other work being complete, we suggest the following:

1. Randy Burkett Lighting Design, Inc. layouts will be complete seven (7) working days after receipt of final landscape/hardscape/civil drawings. Seven (7) day assumption assumes reasonable response time to coordination requests.
2. Four (4) working days required to review and coordinate electrical engineering drawings and work.

Upon your review please contact us with any questions or comments.

Sincerely,



Ronald Kurtz, IALD, MIES
Associate and Senior Designer

RK:vh

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: FIU UCPP Bridge Shift
 County: Miami-Dade
 FPN: 434688-1-58-01
 FAP No.: 54321

Consultant Name: Randy Burkett Lighting Design, Inc.
 Consultant No.:
 Date: 11/17/2016
 Estimator:

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Principal	Lighting Designer 2	Lighting Designer 1	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$65.62	\$72.50	\$31.75	\$31.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	40	6	2	28	4	0	0	0	0	1,555	0	0	0	40	\$1,555	\$38.88
24. Lighting Plans	30	6	1	23	0	0	0	0	0	0	0	0	0	30	\$1,196	\$39.88
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	70	12	3	51	4	0	0	0	0	0	0	0	0	70		
Total Staff Cost		\$787.44	\$217.50	\$1,619.25	\$127.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,751.59	\$39.31

Check = \$2,751.59

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:		\$2,751.59
OVERHEAD:	122%	\$3,354.46
OPERATING MARGIN:	15%	\$412.74
FCCM (Facilities Capital Cost Money):	0.00%	\$0.00
EXPENSES:	5.00%	\$137.58
SUBTOTAL ESTIMATED FEE:		\$6,656.37
Survey (Field)	0	\$0.00
Geotechnical Field and Lab Testing	4-man crew da \$ - / day	\$0.00
SUBTOTAL ESTIMATED FEE:		\$6,656.37
Optional Services		\$0.00
GRAND TOTAL ESTIMATED FEE:		\$6,656.37

ATTACHMENT B

Project Activity 23: Lighting Analysis

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Bridge Relocation
434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	12	12	Provide updated lighting calculations in scope area and in adjacent impacted areas. Review of possible impacts of new lighting in this scope area on aesthetic lighting goals.
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	0	0	
23.5	FDEP Coordination and Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	0	0	
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	16	16	Generate lighting layouts for scope area and make layout changes in adjacent affected zones. Update lighting fixture schedules, companion specifications, and lighting equipment technical sheets.
23.9	Quantities	LS	1	4	4	Determine fixture quantity impact for scope area and adjacent affected zones.
23.10	Cost Estimate	LS	1	4	4	Provide lighting equipment costs from factories and determine total lighting equipment cost addition to project.
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting Analysis	LS	1	4	4	Coordination with other disciplines for potential impacts of lighting layouts on other work. Includes teleconferences.
Lighting Analysis Technical Subtotal					40	
23.13	Field Reviews	LS	1	0	0	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	0%	0	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	0%	0	
Lighting Analysis Nontechnical Subtotal					0	
23.18	Coordination	LS	%	0%	0	
23. Lighting Analysis Total					40	

ATTACHMENT B

Project Activity 23: Lighting Analysis

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	0	0	0		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Airport authority	EA	0	0	0		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				0	Subtotal Project Manager Meetings	0
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
Total Meetings				0	Total Project Manager Meetings (carries to Tab 3)	0

Carries to 23.14

Carries to Tab 3

ATTACHMENT B

24. Lighting Plans

Estimator:

FIU UniversityCity Prosperity Project - Change Order for Bridge Relocation

434688-1-58-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	0	0	0	0	
24.2	Summary of Pay Items Including Designer Interface (TRANS•Port) Input		Sheet	0	0	0	0	
24.3	Tabulation of Quantities		Sheet	0	0	0	0	
24.4	General Notes/Pay Item Notes		Sheet	1	0	0	0	
24.5	Pole Data, Legend and Criteria		Sheet	1	12	2	12	Provide final updates to lighting fixture schedules, companion specifications, and lighting equipment technical sheets.
24.6	Service Point Details		Sheet	0	0	0	0	
24.7	Project Layout		Sheet	0	0	0	0	
24.8	Plan Sheet		Sheet	1	16	2	16	Generate lighting layouts for scope area and make layout changes in adjacent affected zones.
24.9	Special Details		Sheet	0	0	0	0	
24.10	Temporary Lighting Data and Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	0		0	
Lighting Plans Technical Subtotal						4	28	
24.13	Quality Assurance/Quality Control		LS	%	8%		2	Final QA in-house reviews.
24.14	Supervision		LS	%	0%		0	
24. Lighting Plans Total						4	30	

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
SGM ENGINEERING (SGM)
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904



700 W. Hillsboro Blvd.
Bldg 4, Suite 205
Deerfield Beach, FL 33441
(954) 421-1944
(954) 421-1924 fax



November 15th, 2016

Mr. Dwight D. Dempsey, P.E., S.E.
Regional Director
Southeastern Regional Office
FIGG Bridge Engineers, Inc.
424 N. Calhoun St.
Tallahassee, FL 32301

Reference: Proposal # 2014-181 Florida International University (FIU) Modesto A.
Maidique Campus (MMC) Pedestrian Bridge Design – Add Service
Proposed Bridge Shift

Dear Mr. Dwight D. Dempsey,

It is our pleasure to provide additional services related to the shifting of the pedestrian bridge 11' to the north per the attached drawing.

Scope of Professional Services:

- Revised plans to the Final plans package.
- FIU and FDOT reviews and addressing comments
- Expand the south plaza by 11'
- The size of the north plaza will remain the same
- Schedule to be based on FIGG
- Submittal packages will be submitted based on FIGG.
- Update electrical design and plans for new layout of lighting fixtures in North and South Plazas
- Update electrical schedules and loads for any re-specification of equipment within plazas
- Update reference files for mechanical, electrical, and plumbing plans

Codes

- Plans and specifications will be in accordance with the 2014 Florida Building Code 5th Edition and Florida Fire Prevention Code 5th Edition.
- FIU Design Standards.

Schedule

- To be determined.

Deliverables.

- Up to four (4) sets of 90% mechanical and electrical review drawings.
- Up to four (4) sets of 100% construction/permit drawings.
- One set of final documents on disk (pdf or CADD).
- Submittal review comments.
- Site visit comments, only if there is an issue.
- As-built documents (Electronic PDF)

Compensation

Billing Category	Hours Required	Hourly Billing Rate	Total
Principal in Charge	0	\$140	\$0
Project Manager	18	\$125	\$2,250
Senior Engineer	20	\$95	\$1,900
Engineer	15	\$85	\$1,275
SR Designer	0	\$80	\$0
Designer	0	\$75	\$0
Construction Administrator	4	\$90	\$360
Cadd Operator	0	\$55	\$0
Office Administration	0	\$50	\$0
		TOTAL FEE	\$5,785

Additional Services

- Any additions to this scope of services, including but not limited to an increase in the scope of the project, revisions, construction errors, additional site visits and inspections will be provided for an additional negotiated fee or on an hourly basis in accordance with the billing rates shown above.
- Hourly rates are subject to change after 1 year from the date of this proposal.
- Reimbursable expenses have been included in the lump sum fee above.

Payments for Engineering Services

Page **3** of **3**

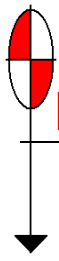
- Monthly progress billings for professional services will be submitted based on percent complete for each task.
- Payment is due upon presentation and considered past due 30 calendar days after the date of the billing.

If you need any additional information or would like the scope modified, please let me know.

Best regards,
SGM ENGINEERING, INC.

Bobby Shahnami, PE, CxA, LEED® AP BD+C
Project Manager

CHANGE ORDER – 05
ADDITIONAL DESIGN PHASE SERVICES TO BE PROVIDED BY
MANUEL G. VERA & ASSOCIATES (MGV)
FOR THE
UNIVERSITYCITY PROSPERITY PROJECT, BT-904


M. G. Vera & Assoc., Inc.
ENGINEERS•SURVEYORS•PLANNERS

Revised November 21, 2016

FIGG
424 North Calhoun Street
Tallahassee, Florida 32301

Re: FIU Signature Bridge / Miami-Dade County

Dear Dwight Dempsey, PE,

MGV appreciates the opportunity to perform our surveying services on this project. Below is our scope of services for our Construction Survey Services of the above referenced project. All survey work will adhere to the STATE OF FLORIDA STANDARDS OF PRACTICE, Chapter 427.027 Florida Statutes and Rule 5J-17 Florida Administrative Code. The proposed Survey Scope of work includes the following Survey Services.

Survey Scope of Services:

Survey and Mapping Tasks:

1. Coordinate with FDOT and SFWMD to determine the Right of way line on the North side of SR-90.
2. Update existing aerial easement according to right of way line.
3. Create a new aerial easement on portion of bridge that falls on SFWMD property.
4. Designate and map the existing 30" water main at the intersection SR-90 and SW 109th Avenue.
5. Designate and map the existing 8" water main at the intersection of SW 7th Terrace and SW 109th Avenue.
6. Provide a bank of 6 utility locates (test holes) to be utilized at the direction of the design engineer. A minimum of 4 test holes will be invoiced per mobilization. Basic MOT is included, but if but if advanced MOT is required to close travel lanes, etc. requiring additional expenses, MG Vera will provide an additional proposal to cover the additional cost.

Subsurface Utility Designating and Locating Conditions and Understandings

The utility markings are for design purposes only. The Florida One Call must be notified forty-eight (48) hours in advance of any excavation.

Accuracy of Geophysical Mapping techniques, although highly reliable, are subject to outside interference. A few examples are: Soil condition, material conductivity, depth of utility, and various other geological anomalies that may distort or hinder electromagnetic and GPR frequencies.


MGV will make every effort possible utilizing state of the art technology to designate and locate underground utilities; however there are no guarantees that all underground utilities or structures will be detected.

MGV will not access confined spaces and is not included in this fee estimate. If accessing confined spaces are required, MGV will notify the client to discuss options. Additional fees may be applicable.

Additional Clarifications and Understandings

- If cap rock or an obstruction is encountered during the test hole phase and further vacuum excavation cannot be performed without the potential for utility damage, MGV will consider the test hole completed, measure the depth to the top of the cap rock or obstruction reached, survey the location and consider the test hole completed and invoice accordingly.

**M. G. Vera & Assoc., Inc.****ENGINEERS•SURVEYORS•PLANNERS**

- 
- The above fee includes only backfill of test holes utilizing material removed in natural ground or cold patch within asphalt pavement or concrete in sidewalks. If additional restoration is required, MG Vera will provide an additional proposal to cover the additional expense.
 - Basic maintenance of traffic (signs, cones) is included, but if **advanced MOT** is required to close travel lanes, etc. requiring additional expenses, MG Vera will provide an additional proposal to cover the additional cost.
 - This estimate does not include permit fees or applications
 - If additional survey control is required to be established to locate the utility designations and completed test holes, a separate proposal will be provided to cover these additional efforts.
 - Permits are not included in this estimate.

Cost and Man-hour breakdown

Please refer to FDOT Project Activity 27: Survey Man-Hour spreadsheet for our man-hour breakdown and to the Fee sheet attached here-to.

We look forward to providing our services and please contact me if you have any questions or require additional information.

Sincerely,
Manuel G. Vera & Associates, Inc.

Manuel G. Vera Jr. PSM

Name of Consultant

Project Information Sheet

Financial Project Identification Number: N/A

Federal Aid Project Identification Number: N/A

Name of Prime / Subconsultant: Manuel G. Vera & Assoc., Inc.

County: Miami - Dade

Project Description: FIU Pedestrain Bridge

Begin Milepost: _____ **End Milepost:** _____ **Project Length:** _____ Miles

Number of Lanes:	Typical Section:	(Urban / Rural / Int.)	Lane Configuration:	(Divided / Undivided)
-------------------------	-------------------------	------------------------	----------------------------	-----------------------

Project Type: _____ (Minor / Major) **Access Management Classification:** _____ **Roadway Classification:** _____ (NHS/FIHS/Off Sys.): _____

CAP Level: _____ **TCP Level:** _____ **Survey Level:** _____

Variances: 1. **Exceptions:** 1.

2. 2.

3. 3.

4. _____ 4. _____

5. 5.

Proposed Design Contract Time: _____ months

Project Preliminary Design Specifics:

Roadway	<===Roadway Plan Type (Plan/Profile, Plan Only, etc.)
Drainage	<===Number of Drainage Structures
Utility Coordination	<===Number of Effected Utilities
Structures - Bridges	<=== Bridge Structures? (Y/N, number)
Structures - Retaining Walls	<=== Retaining Walls? (Y/N, number)
Structures - Misc. Structures	<=== Miscellaneous Structures? (Y/N, number)
Permits	<===Permits Required (WMD, ACOE, Local Permits, etc.)
Signing and Pavement Marking	<===Signing & Pavement Marking Plans Required? (Y / N)
Signalization Intersections	<===Number of Intersections Requiring Signals:
Non-Signalized Intersections	<===Number of Non-Signalized Intersections
Traffic Control	<===Number of phases requiring detailed phase drawings
Landscaping	<===Landscaping Plans Required? (Y / N)
Right-of-Way	<===Right Of Way Plans Required? (Y / N)
Lighting	<===Lighting Plans Required? (Y / N)
Architecture	<===Architectural Plans Required? (Y / N)
Geotech	<===Geotechnical Consultant Services Required? (Y / N)
Survey	<===Survey Consultant Services Required? (Y / N)
JPAs	<===JPAs Prepared by Consultant? (Y / N, if so how many?)
Mitigation Plan	<===Mitigation Plans Required? (Y / N)
Noise Barriers	<===Noise Walls Plans Required? (Y / N)
Specifications Package	<===Specifications Package to be Prepared by Consultant? (Y / N)

ATTACHMENT B

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: FIU Pedestrian Bridge
 County: Miami - Dade
 FPN: N/A
 FAP No.: N/A

Consultant Name: Manuel G. Vera & Assoc., Inc.
 Consultant No.:
 Date: 11/21/2016
 Estimator: Manny Vera Jr.

Staff Classification	Total Staff Hours From "SH Summary Firm"	Senior Surveyor &	Surveyor & Mapper	Survey Intern	Cadd Tech	Survey Tech	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$61.83	\$49.00	\$62.00	\$24.00	\$21.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	65	6	13	13	20	13	0	0	0	0	0	0	0	65	\$2,567	\$39.49
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	31	3	6	6	10	6	0	0	0	0	0	0	0	31	\$1,217	\$39.27
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	96	9	19	19	30	19	0	0	0	0	0	0	0	96		
Total Staff Cost		\$556.47	\$931.00	\$1,178.00	\$720.00	\$399.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$3,784.47	\$39.42

Check = \$3,784.47

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:				\$3,784.47
OVERHEAD:			129%	\$4,877.42
OPERATING MARGIN:			15%	\$567.67
FCCM (Facilities Capital Cost Money):			0.2190%	\$8.29
EXPENSES:			15.34%	\$580.54
SUBTOTAL ESTIMATED FEE:				\$9,818.39
Survey (Field)	4.00	3-man crew da	\$ 1,278.19 / day	\$5,112.76
Utility Locates (Test Holes)	6.00	test holes	\$ 615.00 per test hole	\$3,690.00
SUBTOTAL ESTIMATED FEE:				\$18,621.15
				\$0.00
GRAND TOTAL ESTIMATED FEE:				\$18,621.15

ATTACHMENT B

Project Activity 27: Survey

June 3, 2013

Estimator:
FINAL 06/08/10FIU Pedestrian Bridge
N/A

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.01	Horizontal Project Control (HPC)									Previously established
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.02	Vertical PC / Bench Line									Previously established
	2-Lane Roadway	Mile			0.00		0.00		0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.03	Alignment and Existing R/W Lines									1. Coordinate with FDOT and SFWMD to determine the Right of way line on the North side of SR-90
		Site	1.00	1.00	1.00	1.00	1.00	4.00	4.00	
27.04	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.05	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.06	Topography/DTM (3D)									
		Mile			0.00		0.00		0.00	
27.07	Planimetric (2D)									
		Site			0.00		0.00		0.00	
27.08	Roadway Cross-Sections/Profiles									
		Mile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27.09	Side Street Surveys									4. Designate and map the existing 30" water main at the intersection SR-90 and SW 109th Avenue. 5. Designate and map the existing 8" water main at the intersection of SW 7th Terrace and SW 109th Avenue. 6. Provide a bank of 6 utility locates (test holes) to be utilized at the direction of the design engineer. A minimum of 4 test holes will be invoiced per mobilization. Basic MOT is included, but if but if advanced MOT is required to close travel lanes, etc. requiring additional expenses, MG Vera will provide an additional proposal to cover the additional cost.
27.10	Underground Utilities									
	Designates	Mile/Site	2.00	1.00	2.00	1.00	2.00	5.00	10.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		30%	2.00	0.60	1.00	0.60	5.00	3.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	

ATTACHMENT B

Project Activity 27: Survey

June 3, 2013

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained R/W									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	

ATTACHMENT B

Project Activity 27: Survey

June 3, 2013

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									
			4	0.125	0.50					
27.28	Miscellaneous Surveys									
			0.00	0	0.00	0.00	0.00	0.00	0.00	
Survey Subtotal				Crew Days	4	Field Support Hours	4	Office Support Hours	17	
27.29	Supplemental Surveys									
				4	0		0		0	
27.30	Document Research	Units	24.00						24	1. Coordinate with FDOT and SFWMD to determine the Right of way line on the North side of SR-90.
27.31	Field Reviews	Units	8.00						8	
27.32	Technical Meetings	LS	8.00						8	
27.33	Quality Control / Quality Assurance	LS								
								5%	1	
27.34	Supervision	LS								
								5%	3	
27.35	Coordination	LS								
								3%	1	
27. Survey Total				Crew Days	4	Field Support Hours	4	Office Support Hours	62	

Technical Meetings

Kickoff Meeting	EA	0	0	0
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0

Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0

Progress Meetings	EA	4	2	8
Phase Review Meetings	EA	0	0	0

Total Meetings				8
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Carries to 27.32

SPLS =

PLS =

Office Support =

Total Hours = 65

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 29: Mapping

Estimator:

FIU Pedestrian Bridge
N/A

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Master CADD File						
29.1	Alignment	Mile	0	0		0	
29.2	Section and 1/4 Section Lines	Section	0	0		0	
29.3	Subdivisions / Property Lines	EA	0	0		0	
29.4	Existing R/W	Mile	0	0		0	
29.5	Topography	Mile	0	0		0	
29.6	Parent Tract Properties/Existing Easements	Parcel	0	0		0	
29.7	Proposed R/W Requirements	Parcel	0	0		0	
29.8	Limits of Construction	Mile	0	0		0	
29.9	Jurisdictional/Agency Lines	Linear Mile	0	0		0	
	Sheet Files						
29.10	Control Survey Cover Sheet	Sheet	0	0		0	
29.11	Control Survey Key Sheet	Sheet	0	0		0	
29.12	Control Survey Detail Sheet	Sheet	0	0		0	
29.13	R/W Map Cover Sheet	Sheet	0	0		0	
29.14	R/W Map Key Sheet	Sheet	0	0		0	
29.15	R/W Map Detail Sheet	Sheet	0	0		0	
29.16	Maintenance Map Cover Sheet	Sheet	0	0		0	
29.17	Maintenance Map Key Sheet	Sheet	0	0		0	
29.18	Maintenance Map Detail Sheet	Sheet	0	0		0	
29.19	Reference Point Sheet	Sheet	0	0		0	
29.20	Project Network Control Sheet	Sheet	0	0		0	
29.21	Table of Ownerships Sheet	Sheet	0	0		0	

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Miscellaneous							
29.22	Parcel Sketches	Parcel	2	8	2	16	2. Update existing aerial easement according to right of way line. 3. Create a new aerial easement on portion of bridge that falls on SFWMD property
29.23	TIITF Sketches	Parcel	0	0		0	
29.24	Other Specific Purpose Survey Map	EA	0	0		0	
29.25	Boundary Survey(s) Map	EA	0	0		0	
29.26	R/W Monumentation Map	Mile	0	0		0	
29.27	Title Search Map	LS	1	0		0	
29.28	Title Search Report	LS	1	0		0	
29.29	Legal Descriptions	Parcel	2	6	2	12	2. Update existing aerial easement according to right of way line. 3. Create a new aerial easement on portion of bridge that falls on SFWMD property
29.30	Final Maps/Plans Comparison	Sheet	0	0		0	
Mapping Technical Subtotal					4	28	
29.31	Field Reviews	LS	1	0		0	
29.32	Technical Meetings	LS	1	0		0	
29.33	Quality Assurance/Quality Control	EA	5	5%		1	
29.34	Supervision	EA	5	5%		1	
Mapping Nontechnical Subtotal						2	
29.35	Coordination	LS	5	3%		1	
29.36	Supplemental Mapping	LS	%	0%		0	
29. Mapping Total					4	31	

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
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Technical Meetings

Kickoff meeting	EA	0	0	0	
Control map review	EA	0	0	0	
45/60/90/final map review	EA	0	0	0	
Other meetings	EA	0	0	0	

Subtotal technical meetings					0
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Progress Meetings	EA	0	0	0	
Phase Review Meetings	EA	0	0	0	

Total Meetings					0
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Carries to 29.32

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

September 21, 2016

Maria Vera, President
MANUEL G. VERA & ASSOCIATES, INC.
13960 SW 47th Street
Miami, Florida 33175

Dear Ms. Vera:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify your firm for the following types of work:

- Group 8 - Survey and Mapping
 - 8.1 - Control Surveying
 - 8.2 - Design, Right of Way & Construction Surveying
 - 8.4 - Right of Way Mapping

Your overhead audit has been accepted, enabling your firm to compete for Professional Services projects advertised at the unlimited level, with estimated fees of any dollar amount. This status shall be valid until September 30, 2017 for contracting purposes.

	Home/Branch <u>Office</u>	Facilities Capital Cost <u>of Money</u>	Overtime <u>Premium</u> Reimbursed	<u>Direct Expense</u> 22.32% (Home)
Indirect Cost	128.68%	0.374%		

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

ATTACHMENT B
Manuel G Vera & Associates, Inc.
Weighted Wage Rate Escalation & Operating Margin

Title / Classification	Employee	Current Hourly Rate		Percent Utilized		Weighted Rate	Proposed Rate
SUR Senior Professional Surveyor & Mapper	Manuel G Vera, Jr., PSM	\$90.00	x	25%	=	\$22.50	
	Silvia Nuin, PSM	\$53.50	x	45%	=	\$24.08	
	Christopher Miller, PSM	\$40.87	x	5%	=	\$2.04	
	Mark Sowers, PSM	\$52.89	x	25%	=	\$13.22	
				<u>100%</u>		<u>\$61.83</u>	\$61.83
SUR Professional Surveyor & Mapper	Carlos Alonso, PSM	\$52.00	x	75%	=	\$39.00	
	Ulises Betancourt, PSM	\$40.00	x	25%	=	\$10.00	
				<u>100%</u>		<u>\$49.00</u>	\$49.00
Survey Intern	Michael McKay	\$62.00	x	100%	=	\$62.00	\$62.00
CADD Technician	Juan Carlos Fernandez	\$24.00	x	100%	=	\$24.00	\$24.00
SUR Survey Technician	Yimy Perez	\$22.00	x	50%	=	\$11.00	
	Javier Alonso	\$20.00	x	50%	=	\$10.00	
				<u>100%</u>		<u>\$21.00</u>	\$21.00
Party Chief	Joel Besteiro	\$29.00	x	33%	=	\$9.57	
	Frank Besteiro	\$24.00	x	34%	=	\$8.16	
	Rafael Gomez	\$23.00	x	33%	=	\$7.59	
				<u>100%</u>		<u>\$25.33</u>	\$25.33
Instrument Person	Sergio Truebas Dominguez	\$17.00	x	34%	=	\$5.78	
	Enrique Perez	\$17.00	x	33%	=	\$5.61	
	Angel Figueroa, III	\$16.00	x	33%	=	\$5.28	
				<u>100%</u>		<u>\$16.67</u>	\$16.67
Rod Person / Chain Person	Jorge Pitaluga	\$14.00	x	33%	=	\$4.62	
	Demetrio Hernandez	\$15.00	x	34%	=	\$5.10	
	Juan Carlos Alegre Mercade	\$15.00	x	33%	=	\$4.95	
				<u>100%</u>		<u>\$14.67</u>	\$14.67
Utility Locator	Charly Trejos	\$23.00	x	100%	=	\$23.00	\$23.00
Utility Technician	Christopher Bardales	\$22.00	x	50%	=	\$11.00	
	Juan Poldo	\$18.00	x	50%	=	\$9.00	
				<u>100%</u>		<u>\$20.00</u>	\$20.00

Manuel G Vera & Associates, Inc.
Wage Rate Certification

EMPLOYEE	Current Hourly Rate
Alegre Mercade, Juan Carlos	\$15.00
Alonso, Carlos E.	\$52.00
Alonso, Javier	\$20.00
Bardales, Christopher	\$22.00
Besteiro, Frank	\$24.00
Besteiro, Joel	\$29.00
Betancourt, Ulises M.	\$40.00
Fernandez, Juan Carlos	\$24.00
Figueroa III, Angel	\$16.00
Gomez, Rafael	\$23.00
Hernandez, Demetrio	\$15.00
McKay, Michael A.	\$62.00
Miller, Christopher	\$40.87
Nuin, Silvia	\$53.50
Perez, Enrique	\$17.00
Perez, Yimy	\$22.00
Pitaluga, Jorge	\$14.00
Poldo, Juan	\$18.00
Sowers, Mark R.	\$48.08
Trejos, Charly	\$23.00
Truebas Dominguez, Sergio	\$17.00
Vera Jr, Manuel G.	\$90.00

Manuel G Vera & Associates, Inc.

Proposed Weighted Non-Escalated Rates						
Classification		Senior Professional Surveyor & Mapper	Professional Surveyor & Mapper	CADD Technician	Survey Technician	Survey Intern
Average Hourly Rate		\$61.83	\$49.00	\$24.00	\$21.00	\$62.00
Overhead @ 128.88%		\$79.69	\$63.15	\$30.93	\$27.06	\$79.91
Subtotal		\$ 141.52	\$ 112.15	\$ 54.93	\$ 48.06	\$ 141.91
Expense Percentage @ 15.34%		\$9.48	\$7.52	\$3.68	\$3.22	\$9.51
Operating Margin @ 37.50%		\$23.19	\$18.38	\$9.00	\$7.88	\$23.25
FCCM @ 0.219%		\$0.14	\$0.11	\$0.05	\$0.05	\$0.14
Hourly Rates	=	\$174.32	\$138.15	\$67.67	\$59.21	\$174.80

Proposed Weighted Non-Escalated Rates						
Classification		Party Chief	Instrument Person	Rod Person / Chain Person	Utility Locator	Utility Technician
Average Hourly Rate		\$25.33	\$16.67	\$14.67	\$23.00	\$20.00
Overhead @ 128.88%		\$32.65	\$21.48	\$18.91	\$29.64	\$25.78
Subtotal		\$ 57.98	\$ 38.15	\$ 33.58	\$ 52.64	\$ 45.78
Expense Percentage @ 15.34%		\$3.89	\$2.56	\$2.25	\$3.53	\$3.07
Operating Margin @ 37.50%		\$9.50	\$6.25	\$5.50	\$8.63	\$7.50
FCCM @ 0.219%		\$0.06	\$0.04	\$0.03	\$0.05	\$0.04
Hourly Rates	=	\$ 71.42	\$47.00	\$41.36	\$64.85	\$56.39

Manuel G Vera & Associates, Inc.
Surveying Services

Weighted Non-Escalated Survey Crew Rates				
		<u>2- Man Field Party</u>	<u>3- Man Field Party</u>	<u>4- Man Field Party</u>
Party Chief		\$25.33	\$25.33	\$25.33
Instrument Person		\$16.67	\$16.67	\$16.67
Rod Person / Chain Person			\$14.67	\$14.67
Rod Person / Chain Person				\$14.67
Subtotal		<u>\$42.00</u>	<u>\$56.67</u>	<u>\$71.34</u>
Overhead @	128.88%	<u>\$54.13</u>	<u>\$73.04</u>	<u>\$91.94</u>
Subtotal		<u>\$96.13</u>	<u>\$129.71</u>	<u>\$163.28</u>
Operating Margin @	37.50%	\$15.75	\$21.25	\$26.75
FCCM @	0.219%	\$0.09	\$0.12	\$0.16
Expense Percentage @	15.34%	\$6.44	\$8.69	\$10.94
Hourly Rate		\$118.41	\$159.77	\$201.13
Daily Rate (8 hr.)		\$947.30	\$1,278.19	\$1,609.07

Weighted Non-Escalated Survey Crew Rates				
		<u>2- Man Designating</u>	<u>3- Man Designating</u>	
Utility Locator		\$23.00	\$23.00	
Utility Technician		\$20.00	\$20.00	
Utility Technician			\$20.00	
Subtotal		<u>\$43.00</u>	<u>\$63.00</u>	
Overhead @	128.88%	<u>\$55.42</u>	<u>\$81.19</u>	
Subtotal		<u>\$98.42</u>	<u>\$144.19</u>	
Operating Margin @	37.50%	\$16.13	\$23.63	
FCCM @	0.219%	\$0.09	\$0.14	
Expense Percentage @	15.34%	\$6.60	\$9.66	
Hourly Rate		\$121.24	\$177.62	
Daily Rate (8 hr.)		\$969.89	\$1,420.99	



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

June 17, 2016

Oracio Riccobono, President
GEOSOL, INC.
5795-A NW 151st Street
Miami Lakes, Florida 33014

Dear Mr. Riccobono:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify your firm for the following types of work:

- Group 9 - Soil Exploration, Material Testing and Foundations
- 9.1 - Soil Exploration
- 9.2 - Geotechnical Classification Laboratory Testing
- 9.4.1 - Standard Foundation Studies
- 9.4.2 - Non-Redundant Drilled Shaft Bridge Foundation Studies

Your overhead audit has been accepted, enabling your firm to compete for Professional Services projects advertised at the unlimited level, with estimated fees of any dollar amount. This status shall be valid until June 30, 2017 for contracting purposes.

	Home/Branch Office	Facilities Capital Cost of Money	Overtime Premium Reimbursed	Direct Expense	Published Fee Schedule
Indirect Costs	217.45%	0.288%		0.00% (Home)	Yes

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

GEOSOL, INC.
Suppl. Geotechnical Services During Design Phases
For FIU Pedestrian Bridge Over SW 8th Street
Miami-Dade County, FL

DATE PREPARED: Aug.26, 2016

EMPLOYEE CATEGORY & CERTIFIED WAGE RATES

PROFESSIONAL CATEGORY	2016	2016	2016
	HOURLY RATE (\$) UNBURDENED	PROPOSED CONTRACT HOURLY RATE (\$) UNBURDENED	PROPOSED CONTRACT HOURLY RATE (\$) BURDENED
SENIOR ENGINEER	59.93	59.93	199.41
PROJECT ENGINEER	46.37	46.37	154.29
SECRETARY/CLERICAL	37.44	37.44	124.58

FDOT OVERHEAD RATE = 217.45 %

OPERATING MARGIN = 15%

FCCM = 0.288%

DIRECT EXPENSES = 0%

MULTIPLIER = $(217.45/100)+1+(15/100)+(0.288/100)+(0/100) =$ 3.3274

YEARLY ESCALATION RATE = 0%

I CERTIFY THAT THE ABOVE RATES ARE THOSE CHARGED TO CLIENTS
IN THE PRIVATE AND PUBLIC SECTOR.

RESPECTFULLY SUBMITTED BY
GEOSOL, INC.



ORACIO RICCOBONO, P.E.
PRESIDENT



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

June 28, 2016

Antonio Acosta, President
A & P CONSULTING TRANSPORTATION ENGINEERS CORP.
10305 NW 41st Street, Suite 115
Doral, Florida 33178

Dear Mr. Acosta:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify your firm for the following types of work:

Group 3 - Highway Design - Roadway

- 3.1 - Minor Highway Design
- 3.2 - Major Highway Design
- 3.3 - Controlled Access Highway Design

Group 4 - Highway Design - Bridges

- 4.1.1 - Miscellaneous Structures
- 4.1.2 - Minor Bridge Design
- 4.2.2 - Major Bridge Design - Steel

Group 5 - Bridge Inspection

- 5.4 - Bridge Load Rating

Group 6 - Traffic Engineering and Operations Studies

- 6.1 - Traffic Engineering Studies
- 6.2 - Traffic Signal Timing
- 6.3.1 - Intelligent Transportation Systems Analysis and Design
- 6.3.2 - Intelligent Transportation Systems Implementation
- 6.3.3 - Intelligent Transportation Traffic Engineering Systems Communications

Group 7 - Traffic Operations Design

- 7.1 - Signing, Pavement Marking and Channelization
- 7.2 - Lighting
- 7.3 - Signalization

- Group 10 - Construction Engineering Inspection
- 10.1 - Roadway Construction Engineering Inspection
 - 10.3 - Construction Materials Inspection
 - 10.4 - Minor Bridge & Miscellaneous Structures CEI

- Group 13 - Planning
- 13.4 - Systems Planning
 - 13.5 - Subarea/Corridor Planning
 - 13.6 - Land Planning/Engineering
 - 13.7 - Transportation Statistics

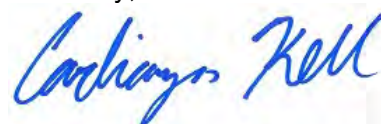
Your overhead audit has been accepted, enabling your firm to compete for Professional Services projects advertised at the unlimited level, with estimated fees of any dollar amount. This status shall be valid until June 30, 2017 for contracting purposes.

	Home/Branch <u>Office</u>	Field <u>Office</u>	Facilities Capital Cost <u>of Money</u>	Overtime <u>Premium</u> Reimbursed	<u>Direct Expense</u>
Overhead Rate	169.29%	138.11%	0.028%		6.24% (Home) 19.42% (Field)*

*Rent and utilities excluded from field office rate. These costs will be directly reimbursed on contracts that require the consultant to provide field office.

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,



Carliayn Kell
Professional Services
Qualification Administrator



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

August 14, 2015

Linda Figg, President/CEO
FIGG BRIDGE ENGINEERS, INC.
424 North Calhoun Street
Tallahassee, Florida 32301

Dear Ms. Figg:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify your firm for the following types of work:

- Group 4 - Highway Design - Bridges
 - 4.1.1 - Miscellaneous Structures
 - 4.1.2 - Minor Bridge Design
 - 4.2.1 - Major Bridge Design - Concrete
 - 4.2.3 - Major Bridge Design - Segmental
 - 4.2.3 - Major Bridge Design - Segmental
 - 4.3.1 - Complex Bridge Design - Concrete
- Group 5 - Bridge Inspection
 - 5.4 - Bridge Load Rating

Your overhead audit has been accepted, enabling your firm to compete for Professional Services projects advertised at the unlimited level, with estimated fees of any dollar amount. This status shall be valid until June 30, 2016 for contracting purposes.

	Home/Branch Office	Facilities Capital Cost of Money	Overtime Premium Excluded	Direct Expense
Indirect Cost	149.45%	0.288%		8.89% (Home)

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

www.dot.state.fl.us

GEOSOL, INC.

FEE PROPOSAL FOR SUPPLEMENTAL GEOTECHNICAL SERVICES DURING CONSTRUCTION

for Proposed Pedestrian Bridge over SW 8th Street at Florida International University (FIU)

Miami-Dade County

GEOSOL PROPOSAL No.: P-215205-SCS

DATE PREPARED: 11/15/16 (For Use of Driven Piles at Piers 1 and 3 in lieu of Spread Footings)

DESCRIPTION	UNITS	# OF UNITS	UNIT RATE (\$)	TOTAL \$
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CONSTRUCTION PHASE (POST-DESIGN) GEOTECHNICAL TESTING AND INSPECTIONS

A) BRIDGE FOUNDATIONS (DRIVEN PILES) - Piers 1 and 3

Driven Piles Installation Plans for Piers 1 and 3 (Sr. Engineer)	hour	6	\$160.00	\$960.00
Driven Pile CTQP Inspector for Piers 1 and 3. Assume 14 piles per pier, total 28 piles. Assume 3 Piles/Day & 10 Days for 28 Piles @ a rate of 10 hours/day.	hour	100	\$70.00	\$7,000.00
PDA Testing - for Piers 1 and 3 - Assume 100% PDA Testing & 10 Days of Pile Driving for 28 Piles	day	10	\$2,000.00	\$20,000.00
Vibration Monitoring Equipment - for Piers 1 and 3 - Assume 10 Days of Pile Driving for 28 Piles	day	10	\$175.00	\$1,750.00
Vibration Monitoring Eng. Intern - for Piers 1 and 3 - Assume 10 Days of Pile Driving for 28 Piles @ a rate of 10 hours/day.	hour	100	\$85.00	\$8,500.00
Driven Piles Piers 1 and 3 Foundation Certification Packages (Sr. Engineer) - One Foundation Certification Package per pier @ 4 hours each. Total 8 hours	hour	8	\$160.00	\$1,280.00
Senior Project Engineer - Vibration Monitoring Reporting - for Piers 1 and 3	hour	20	\$160.00	\$3,200.00
Clerical - for Foundation Certification Package & Vibration Monitoring - for Piers 1 and 3	hour	20	\$55.00	\$1,100.00

B) GEOTECHNICAL ENGINEER FOR SUPPORT DURING CONSTRUCTION

Senior Engineer	hour	16	\$160.00	\$2,560.00
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SUB-TOTAL (GEOTECHNICAL TESTING & INSPECTION DURING CONSTRUCTION)

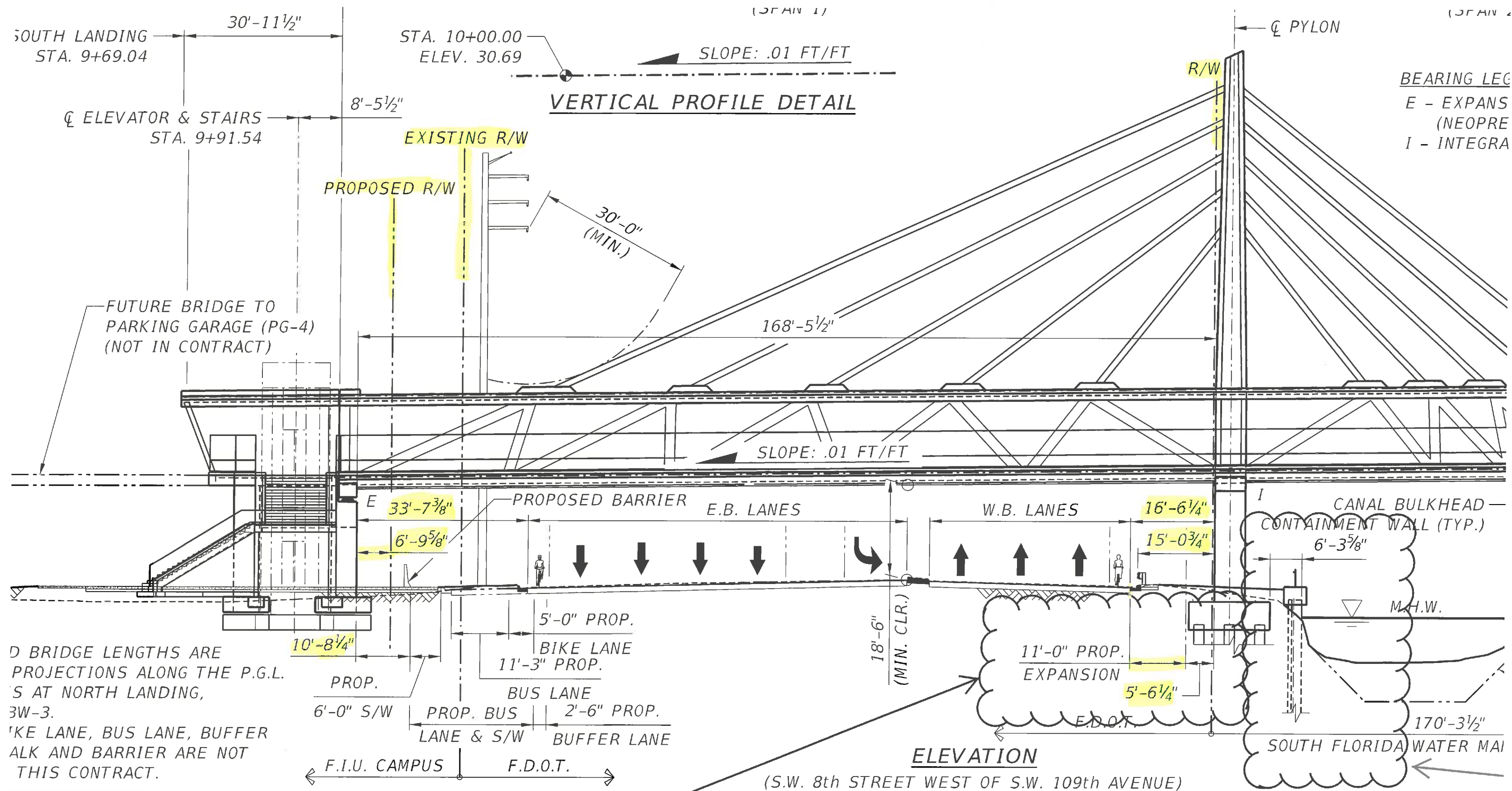
\$46,350.00

TOTAL GEOTECHNICAL TESTING & INSPECTION SERVICES DURING CONSTRUCTION

\$46,350.00

EXCLUSIONS:

1) This proposal does not include any earthwork testing, concrete testing for drilled shafts, cap, footings or any other structural component of this project.



REVISIONS

Pedestrian Bridge Shifted 11' to North
Based on Direction Received from FDOT
on 10/31/2016 for Future Widening

ENGINEER OF RECORD:



424 North Calhoun Street
Tallahassee, Florida 32301

FLORIDA CERTIFICATE OF AUTHORIZATION NO. 5618
W. DENNEY PATE, P.E. - P.E. NO. 34332

DRAWN BY:

DCB

CHECKED BY:

MF

DESIGNED BY:

EDL

CHECKED BY:

MF



FLORIDA
INTERNATIONAL
UNIVERSITY



SHEET TITLE:

GEN

ROAD NO.

COUNTY

PROJECT ID

MIAMI - DADE

434688-1-58-01

PROJECT NAME:



October 17, 2016

Log No. FIU004

Alberto Delgado
Florida International University
11555 SW 17 ST CSC 251
Miami, FL 33199

E-MAILED

UniversityCity Pedestrian Bridge • Contract # BT-904/ARI 73 • Federal Project ID 434688-1-58-01 • MCM # 2015-711

RE: Pylon Location

Dear Mr. Delgado,

MCM is in receipt of FIU's email dated 12Oct16 in which FDOT states that the Design-Build team has not met the minimum requirements for design; more specifically in relation to the substructure and the center pylon of the UniversityCity Bridge over S.W. 8th Street located on the South bank of the C-4 Canal. After reviewing the FDOT comments, FDOT Design standards and specifications applicable to this project, MCM respectfully disagrees with these comments and assures FIU that our design complies with all applicable FDOT standards and specifications.

Specifically, the FDOT issues in question, as provided by Mr. Alfredo Reyna (FDOT PM), are as follows:

"It is the Department's position that the design team needs to meet the Plans Preparation Manual (PPM) requirements, which are:

- *By table: **"2.11.6 Horizontal Clearance to Bridge Piers and Abutments"** they need to provide minimum
 - 16 feet from the edge of travel lane.*
- *By **Section 8.7.1.**
 - 4. **Vertical clearance criteria is found in table 2.10.1 of this volume. Lateral offset must account for future widening plans of the roadway below***

As per PPM, all deviations of these minimum requirements need approved design variations /exemptions prior to proceeding with final design. Design Variation /exceptions process is outlined in Chapter 23 of the PPM. "

MCM has prepared the following responses to the FDOT issues listed above:

ITEM 1: TABLE 2.11.6 HORIZONTAL CLEARANCE TO BRIDGE PIERS AND ABUTMENTS

Per attachment 1, the reference of 16 foot clearance from edge of travel lane, this specific criteria is for Urban Roadways with Curb & Gutter and a speed limit of 45 MPH or greater. However, the location in question (Attachment 2) along S.W. 8th Street is an Urban Roadway with Curb & Gutter and a Roadside Barrier in which case PPM Table 2.11.6 states "use the minimum barrier offset as shown in Table 4.3.1 and Figure 2.10.5". As shown in Figure 2.10.5 and Table 4.3.1 when a roadside barrier is present, (existing guardrail) (Figure 1) which is the projects final condition, the minimum offset required by PPM criteria is 4 feet. Therefore, the current proposed design meets criteria per the 2014 PPM and Design Standards and no variation is required.

Existing Conditions at the Location of the New FIU Pedestrian Bridge

Existing conditions at the north side of S.W. 8th Street at the location of the new pedestrian bridge pylon are shown below in Figure 1. Note the curb and gutter along with the w-beam roadside barrier at this location. The curb and gutter along with roadside barrier detail will be used for the final condition after the new pedestrian bridge is completed. The vertical post spacing of the existing barrier is approximately 6'. The 2014 PPM is specific to the use of curb and gutter with roadside barrier when determining the required offset distances.

Figure 1 - Existing Conditions at Location of New FIU Pedestrian Bridge Pylon along S.W. 8th Street (Looking Northeast)



Furthermore, Table 2.11.6 also references Structure Design Guidelines Section 2.6 (Attachment 3) for pier protection details. Specifically, Section 2.6.3 (shown below) of these guidelines states that piers located within the setback distance should either be designed for the LRFD equivalent static force or shield piers using Design Standards Index 411 Pier Protection Barriers or other similar Test Level 5 barriers. The pylon for the new FIU Pedestrian Bridge has been designed for the LRFD equivalent static force. A w-beam roadside barrier (guardrail) is also provided at the pylon location in accordance with PPM, Volume 1, Chapter 4.

ITEM 2: SECTION 8.7.1

Chapter 8 – Pedestrian, Bicycle and Public Transit Facilities, Section 8.7.1 (Attachment 4) Design Criteria states that “Horizontal clearances shall take into effect future widening plans of the roadway below.” The project RFP documents do not include any reference for future widening along the north side of S.W. 8th Street at the location of the new pedestrian bridge. The RFP is very specific and includes provisions for a future widening on the south side of S.W. 8th Street as described below in the following sections of the RFP Design Criteria. The full design criteria are included as Attachment 5 and the Concept plans are provided as Attachment 6. Including a widening to the north side of SW 8th Street is a new condition not presented in the RFP that could not have been anticipated in our Technical Proposal or pricing.

FIU-UniversityCity Prosperity Project – Pedestrian Bridge, Design Criteria dated April 2015

Section 1.1 Architectural Vision of the RFP requires a minimum setback of 35' between the FIU north property line for all bridge supports, elevator tower, and staircase. This setback was required for a planned bus terminal access along the south side of S.W. 8th Street. No reference to a setback distance on the north side of S.W. 8th Street at the location of the new pedestrian bridge pylon set on the South Bank of the C-4 Canal is listed. See Attachment 2 for the proposed setback distance provided on the south side of S.W. 8th Street.

In keeping with Ambulatory Care Clinic to the East and all the development eastward on US41 a minimum setback of 35 feet is required between the FIU north property line located from the south side of the existing sidewalk (back of sidewalk) for all bridge supports, the elevator tower, and staircase.

Section 1.2 Description of Bridge Requirements lists an overall bridge length of approximately 250' and references the 35' setback distance on the south side of S.W. 8th Street. No reference to a setback distance on the north side of S.W. 8th Street is listed.

1.2 Description of Bridge Requirements

The crossing is to be a single span bridge over the US41 right-of-way. The overall length is approximately 250 ft with supports located a minimum of 35' south of the back of sidewalk on SW 8th street on the south side and on SW 7th Terrace on the existing northern canal bank. A support pier may be located on the southern canal bank between US41 and the canal.

Section 3 Geometric Layout and Clearance Requirements references the concept plans in the Appendix for the geometrics of the bridge. The Conceptual Plans were not included in the Appendix to the Bridge Design Criteria but were included as an attachment to the RFP and are included as Attachment 6 to this document. Sheet No. 13 shows the plan view alignment of the pedestrian bridge concept with a bridge support located directly adjacent/north of S.W. 8th Street. A proposed barrier is labeled at this location. Sheet No. 17 shows the elevation view alignment with a bridge support located directly adjacent/north of S.W. 8th Street. The same proposed barrier is shown and labeled at this location.

3 GEOMETRIC LAYOUT AND CLEARANCE REQUIREMENTS

3.1 Unit and Dimensions

English units are used in this project. All dimensions are measured horizontally and vertically at 70°F, unless otherwise noted.

3.2 Datum

Elevations are based on the National Geodetic Vertical Datum of 1929 (NGVD29).

3.3 Roadway Clearance

The completed bridge shall provide a minimum vertical clearance over the roadway of 17'-6" per PPM, Volume 1, Table 2.10.1.

3.4 Horizontal and Vertical Alignment

See Conceptual Plans in Appendix for geometrics of the bridge.

FDOT Comments on New Pedestrian Bridge Design Submittals

Comments by FDOT reviewers (Attachment 8) regarding FDOT future plans being studied for widening S.W. 8th Street were provided for the following submittals:

- Preliminary Plans,
- 90% Foundation Plans,
- 90% Roadway Plans
- 90% Re-submittal of Foundation Plans.

Each of these ERC comments was closed with no modification to the pedestrian bridge plans required. Each time the issue of future widening of 8th Street was brought up during comment resolution and project progress meetings (Attachment 7), FDOT PM closed the comment with no further action required. MCM was advised by the FDOT PM that no widening was taking place adjacent to the westbound lanes of S.W. 8th Street. MCM was never informed and/or directed to account for a future widening that would affect the westbound lanes.

Additional Concerns

- Moving the pylon 16 feet to the North would require a complete bridge redesign, delay the project and increase the cost of the project
- Widening of westbound 8th Street to the north, after redesign of the pylon to the north, would not provide the desired offset clearance after future widening.
- Moving the pylon to the north would place added flow restrictions on the C-4 Canal that SFWMD and/or USACOE may not accept, increasing the chance that a permit may not be issued for this work.

CONCLUSION

MCM's proposed bridge design complies with FDOT criteria, Design Standards and RFP as shown within this letter and all provided attachments. The location of the new pedestrian bridge pylon exceeds the minimum offset distances as required by the 2014 PPM and therefore a design variance or exception for the pylon is not applicable. The coordination that took place between FIU and FDOT prior to award of this project at no time included widening on the north side of S.W. 8th Street and this was never a concern to be contemplated at time of Bid, or through design submittals to date. Throughout the design process FDOT has advised MCM that no widening was to occur along the westbound lane of S.W. 8th Street, therefore, our design meets criteria set forth in Chapter 8 of the PPM and no variation is required. Should the widening of SW 8th Street westbound become a requirement of this project, this would result in a significant redesign of the bridge that may not look anything like the current design, result in significant postponement of the project for the redesign itself and all associated reviews, permitting and significant cost increase.

We are available at your convenience to answer any questions or provide additional information, if deem necessary.

Sincerely,
MCM



Rodrigo Isaza
Senior Project Manager

Encl: Attachment 1 – PPM Chapter 2 (3 pgs)
Attachment 2 – Pylon Location Sketch (1 pg)
Attachment 3 – SDG 2.6.3 (1 pg)
Attachment 4 – PPM Chapter 8 (1 pg)
Attachment 5 – Bridge Design Criteria (80 pgs – only cover page included)
Attachment 6 – RFP Concept Plans (3 pgs)
Attachment 7 – Email coordination ERC Comment (2 pgs)
Attachment 8 – Pylon ERC Comments (1 pg)

cc: John Cal, FIU
Robert Griffith, FIU
Robert T. Murphy, P.E., MCM
File

Table 2.11.6 Horizontal Clearance to Bridge Piers and Abutments

Bridge Piers and Abutments shall be located outside the clear zone (see also **Figures 2.10.1** thru **2.10.3**) except as follows:

Urban Curb or Curb and Gutter (Design Speed ≤ 45 mph), shall be located no closer than:

- 16 feet from the edge of the travel lane; or
- 4 feet from face of outside curbs or
- 6 feet from the edge of inside traffic lane;

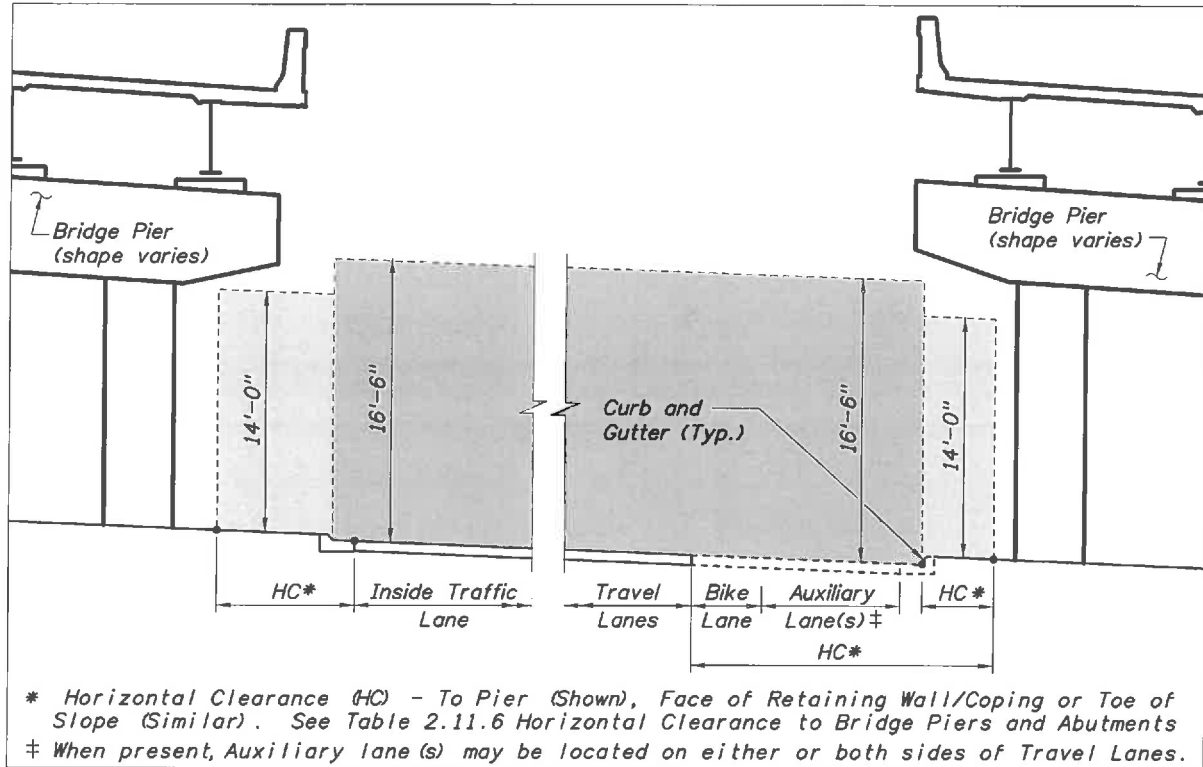
whichever provides the greater setback. See also **Figures 2.10.4.A** thru **2.10.4.B**.

Rural and Urban with Roadside Barriers:

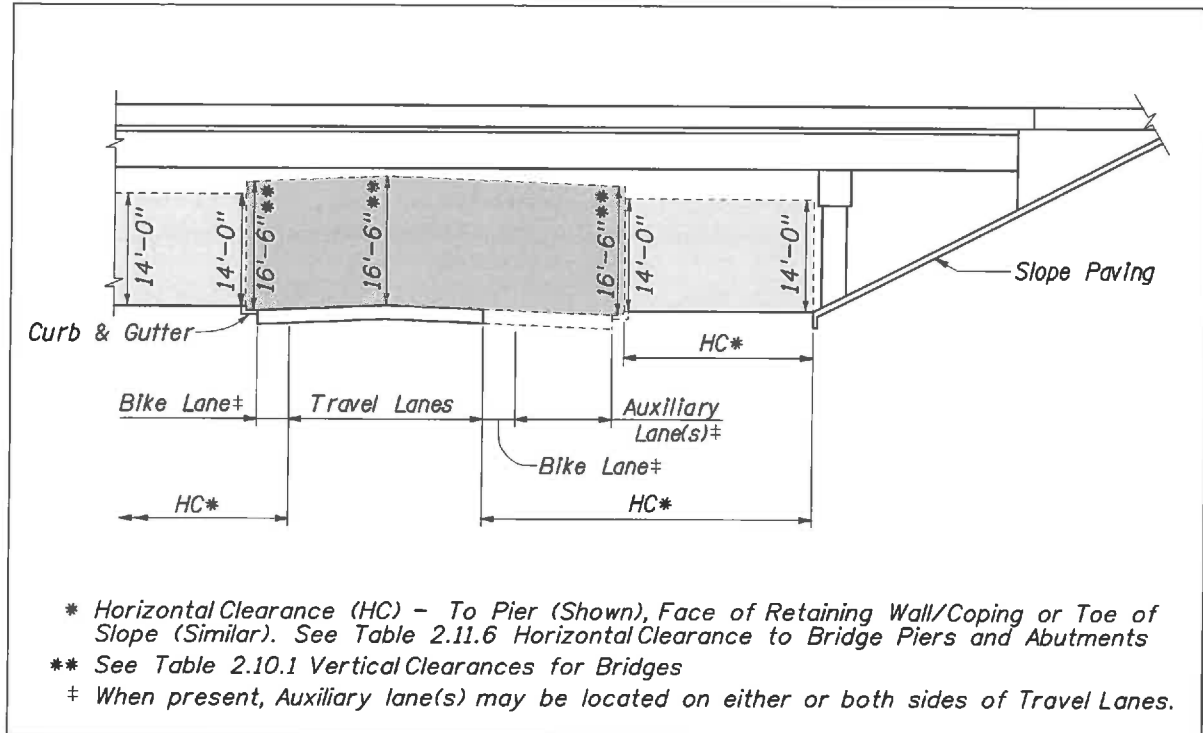
The minimum barrier offset as shown in **Table 4.3.1** measured from the face of the barrier.
See also **Figure 2.10.5**.

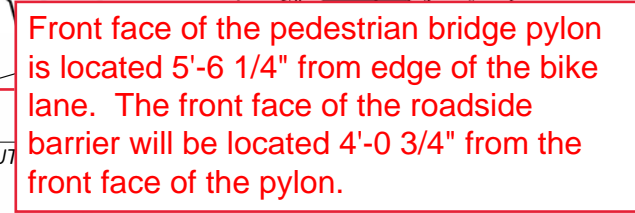
- Notes:
1. Pier protection and design shall comply with the requirements provided in **Structures Design Guidelines, Section 2.6**.
 2. Locate piers outside of clearance envelopes as shown. Additional clearance may be required for sidewalks, shared use paths, intersection sight distance and future widening of the lower roadway.
 3. Evaluate the potential for widening of a lower roadway at a given location based on adjacent geometric constraints, (e.g. other bridge piers, MSE walls, significant water features, etc.).




Figure 2.10.4.B Clearances – Urban Arterials and Collectors (Curb and Gutter) ≤ 45 mph – Section through Bridge



**Figure 2.10.4.A Clearances – Urban Arterials and Collectors
(Curb and Gutter) ≤ 45 mph – Elevation of Bridge**





REVISIONS						ENGINEER OF RECORD:		DRAWN BY: DCB			SHEET TITLE:		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	 424 North Calhoun Street Tallahassee, Florida 32301 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 5618 W. DENNEY PATE, P.E. - P.E. NO. 34332		  FLORIDA INTERNATIONAL UNIVERSITY			GENERAL PLAN AND ELEVATION		
								ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME:		SHEET NO.
									MIAMI - DADE	434688-1-58-01	UNIVERSITYCITY PROSPERITY PROJECT		B - 4

2.6.3 New Structures Over or Adjacent to Roadways (Rev. 01/16)

- A. Design all piers located within the setback distance for the **LRFD** equivalent static force, or shield piers using **Design Standards** Index 411 Pier Protection Barriers or other similar Test Level 5 barriers if the calculated annual frequency for the pier to be hit by a heavy vehicle is greater than or equal to 0.0001 for critical bridges or 0.001 for typical (non-critical) bridges. Utilize the shear reinforcement required at the pier base to a distance of 8 feet above the adjacent ground surface.
- B. Provide roadside barriers in accordance with **PPM**, Volume 1, Chapter 4 for piers located within the clear zone or lateral offset limits and that are not shielded using **Design Standards** Index 411 Pier Protection Barriers or other similar Test Level 5 barriers as described above.
- C. Do not use pile bents within the setback distance.

2.6.4 Roadway Work Beneath or Adjacent to Existing Structures (Rev. 01/16)

- A. For existing piers located within the setback distance that are theoretically capable of resisting the **LRFD** equivalent static force, provide roadside barriers in accordance with the **PPM**, Volume 1, Chapter 4, as applicable, unless a need (other than pier protection) can be documented to provide **Design Standards** Index 411, Pier Protection Barriers or other TL-5 barriers.
- B. Consider local crash histories of both large and small vehicles, site conditions, shoulder widths, traffic counts, traffic mixes, design speed, sight distances, pedestrian facilities, utilities and redundancy within the pier when documenting the need to provide 42-inch or 54-inch Pier Protection Barriers.
- C. For existing piers and pile bents located within the setback distance that are not theoretically capable of resisting the **LRFD** equivalent static force and that are unshielded, shielded by guardrail or shielded by non-crash tested barrier wall:
 - 1. When Resurfacing, Restoration, Rehabilitation (RRR) criteria applies and on freeway resurfacing projects, determine the need for roadside barriers in accordance with the **PPM**, Volume 1, Chapter 4, as applicable. Existing guardrail meeting the requirements of **PPM**, Volume 1, Chapter 4 may be left in place. If there is insufficient deflection space for the existing guardrail and/or new concrete barrier wall is determined to be required, provide **Design Standards** Index 411, Pier Protection Barrier or other TL-5 barriers if the calculated annual frequency for the pier to be hit by a heavy vehicle is greater than or equal to 0.0001 for critical bridges or 0.001 for typical (non-critical) bridges. At other locations where concrete barrier wall is determined to be required, provide **Design Standards** Index 410, Concrete Barrier Walls. Where required sight distances cannot be maintained using **Design Standards** Index 411 Pier Protection Barriers or other TL-5 barriers, **Design Standards** Index 410, Concrete Barrier Walls may be used to shield piers. A Design Variation for pier strength is required.

8.7 Bridges, Overpasses, and Underpasses

A bridge, an overpass, or an underpass may be necessary to provide pedestrian/bicycle continuity to sidewalks, bicycle lanes and shared use paths. Bicyclists should be accommodated at all pedestrian bridges (e.g., provide an alternative to stairs).

8.7.1 Design Criteria

The overpass or bridge design shall be in accordance with the criteria established below:

1. ***FDOT Structures Design Guidelines – Chapter 10.***
2. ***Section 8.2*** of this volume.
3. The minimum clear width for new FDOT pedestrian bridges is:
 - a. On a pedestrian structure - 8 feet.
 - b. On a shared use path structure - 12 feet.
 - c. If the approach sidewalk or path is wider than these minimums, the clear width of the structure should match the approach width. The desirable clear width should include an additional 2-foot wide clear area on each side.
4. Vertical clearance criteria shall be as per ***Chapter 2, Table 2.10.1*** of this volume. **Horizontal clearances shall take into account future widening plans of the roadway below.**
5. Ramps
 - a. Comply with ADA requirements. See the ***Production Support Office - Accessibility Issues (ADA) Website***
 - b. Ramps (routes with grades > 5%) should be provided at all pedestrian separation structures. When possible, stairways should be provided in addition to ramps.
 - c. Design ramps with the least possible grade, but in no case more than 8.33% and with 5 feet long, intermediate level platforms at a maximum 30-inch rise. Provide level platforms 5 feet long at the top of the ramp and 6 feet long at the bottom.
 - d. Provide full-length pedestrian ADA handrails on both sides of pedestrian ramps.
6. Fencing/Railing
 - a. Provide fencing/railing options in accordance with the ***SDG Chapter 10.***
 - b. Provide full or partial screening on pedestrian bridges crossing FDOT right

FIU-UniversityCity Prosperity Project - Pedestrian Bridge

Design Criteria

April 2015 Revision

(Rev 1: revised location of northern tower)

Prepared By:

TYLIN INTERNATIONAL
engineers | planners | scientists

FLORIDA INTERNATIONAL UNIVERSITY AND
CITY OF SWEETWATER UNIVERSITYCITY
CONCEPTUAL PLANS

UNIVERSITYCITY COMPLETE STREETS
INCLUDING SIGNATURE
PEDESTRIAN-ORIENTED-SHARED USE
BRIDGE, PLAZAS, PAVILIONS, AND ADVANCED
INTERMODAL & MULTIMODAL STATION (AIMS)

INDEX OF PROJECT PLANS

SHEET NO.	SHEET DESCRIPTION
1	COVER
2	KEY SHEET
3-4	EXISTING CONDITIONS & DEMOLITION FOR ALTERNATIVE 1
5-7	EXISTING CONDITIONS & DEMOLITION
8	ADVANCED INTERMODAL STATION (AIMS) PLATFORM
9	ADVANCED INTERMODAL STATION (AIMS) PLATFORM ALTERNATIVE 2
10-11	UNIVERSITY CITY IMPROVEMENTS ALTERNATIVE 1
12	UNIVERSITY CITY IMPROVEMENTS
13	COMPLETE STREET, US-41 INTERSECTION (FIU- SWEETWATER)
14	COMPLETE STREET SWEETWATER SECTION
15-17	TYPICAL SECTION
18	SWEETWATER RIGHT OF WAY
19	COMPLETE STREET DETAILS
20	COMPLETE STREET LIGHTING DETAILS - SWEETWATER
21	COMPLETE STREET LIGHTING DETAILS - FIU
S-1	SIGNING & PAVEMENT MARKING PLANS
S-2	SIGNING & PAVEMENT MARKING PLANS ALTERNATIVE 2
S-3-S-4	SIGNING & PAVEMENT MARKING PLANS

LH-02 - LH-11 HARDSCAPE PLANS

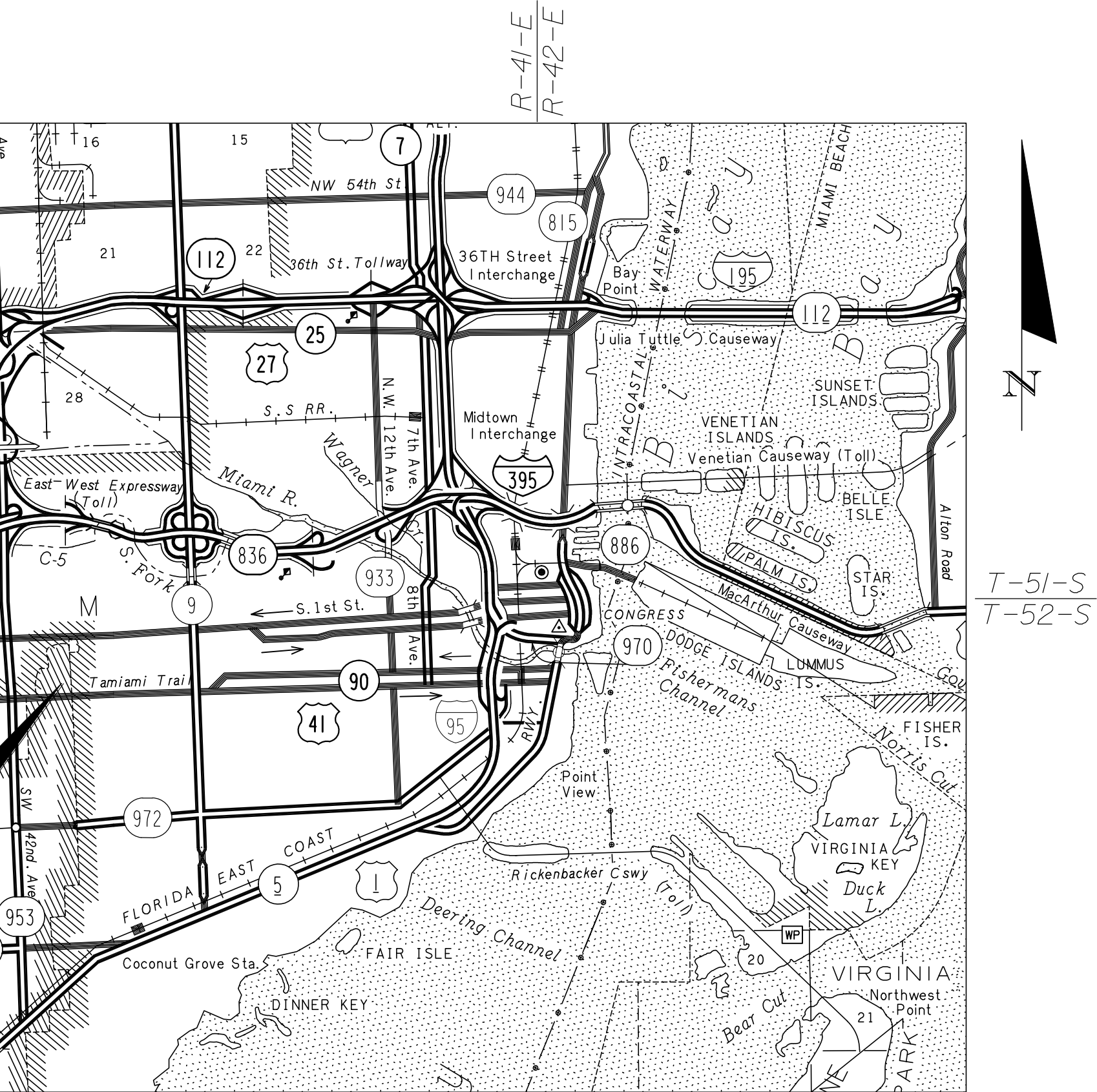
LP-02 - LP-06 LANDSCAPE PLANS

1

A-1 APPENDIX 1
BROTHERS TO THE RESCUE MEMORIAL PLAZA PLANS

REVISIONS

1 BRIDGE LANDING AND PLAZA, TIGER GRANT LIMITS AND PAVEMENT
MARKING CHANGES (REVISED 04/15)
PLAN SHEETS INCLUDE 6, 9, 13, 14, 16-18 ,S-2,S-3, LH-05 & LP-05



GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA
DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS
DATED 2014, AND STANDARD SPECIFICATIONS FOR ROAD
AND BRIDGE CONSTRUCTION DATED 2010, AS AMENDED
BY CONTRACT DOCUMENTS.

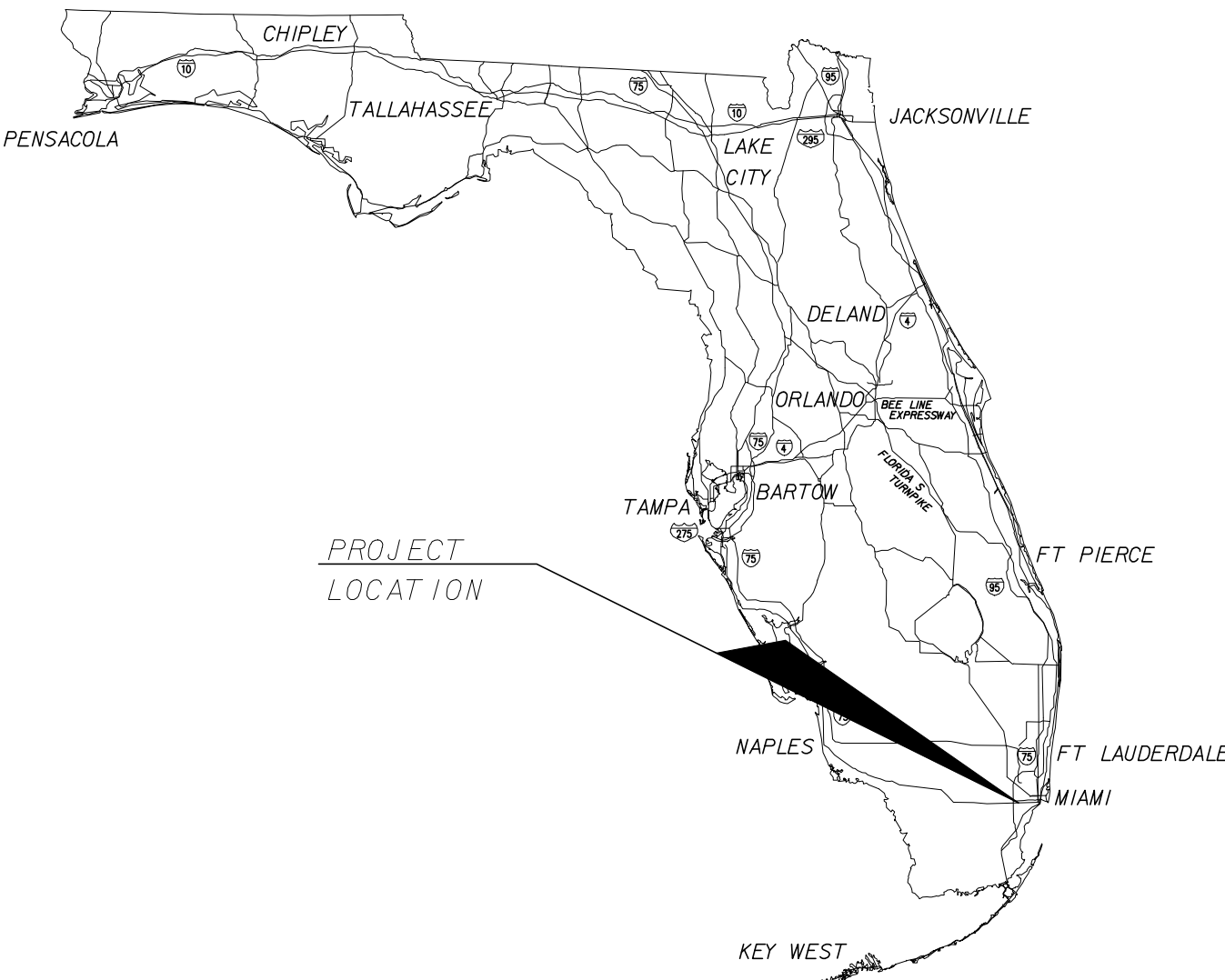
APPLICABLE DESIGN STANDARDS MODIFICATIONS: 01-01-14

Foe Design Standards Modification Click on
"Design Standards" at the following web site:
<https://www.dot.state.fl.us/rddesign/>

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION
04/15		REMOVAL OF APPENDIX 1

REV. 1
APRIL, 2015

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.



PREPARED FOR:



CONST. PLANS AND DETAILS PREPARED BY:

TYLIN INTERNATIONAL

201 ALHAMBRA CIRCLE, SUITE 900
CORAL GABLES, FLORIDA 33134
T 305.567.1888 F 305.567.1771
CERTIFICATE OF AUTHORIZATION 00002017





Landscape Architect



2333 Brickell Ave # 216
Miami, Florida 33129
T 786.314.5906 F 305.854.8777

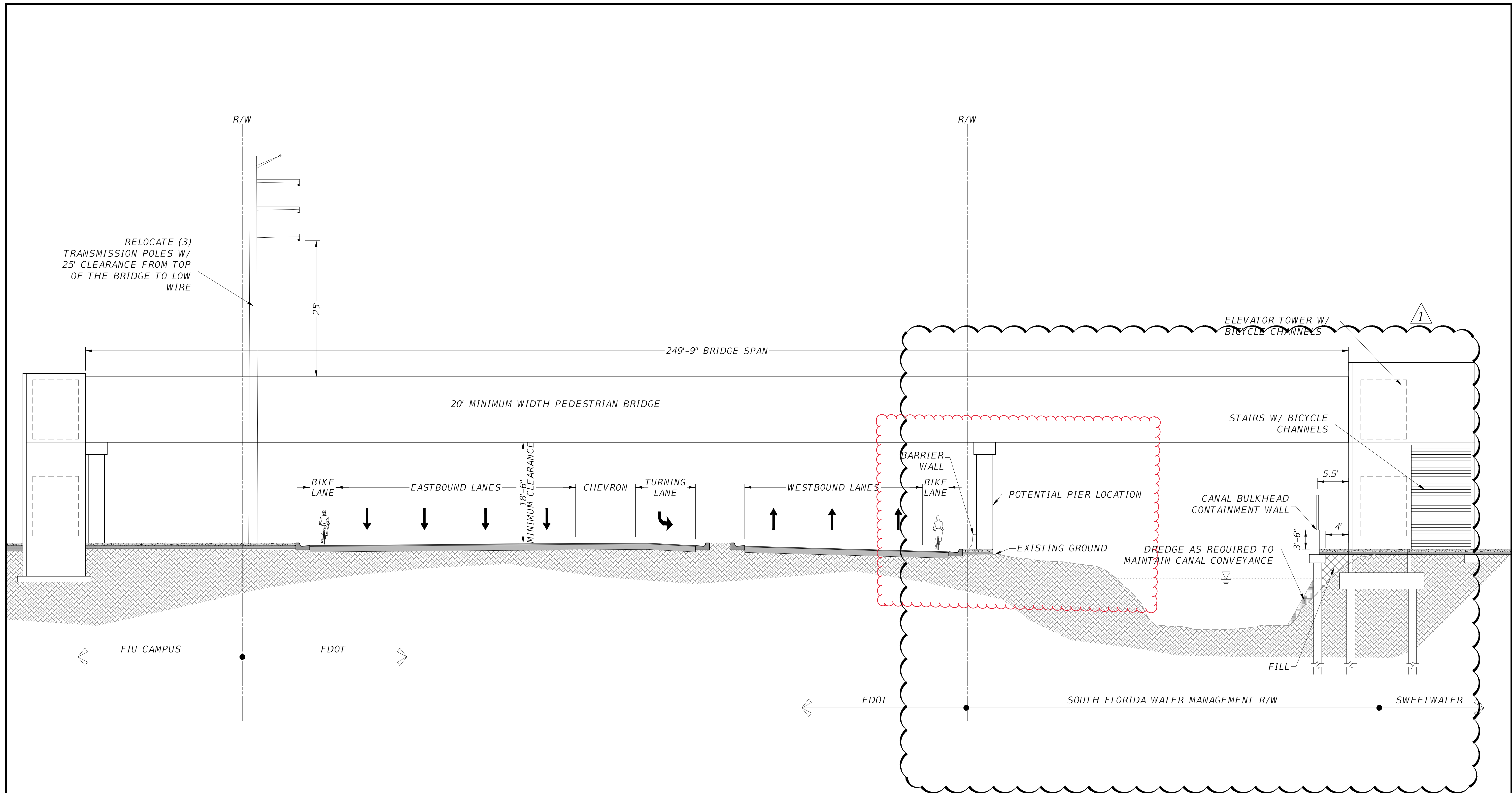
FISCAL YEAR	SHEET NO.
14	1



	LANDSCAPE AREAS. REFER LANDSCAPE SHEETS.
	PROP. CONCRETE DRIVEWAY
	PROP. 4" CONCRETE SIDEWALK
	LIMITS OF M&R

1. IT WILL BE DETERMINED DURING THE FINAL DESIGN PHASE, WHETHER OR NOT AN OBSTRUCTION AT THE ENTRANCES OF THE PLAZAS WILL NEED TO BE IMPLEMENTED. SHOULD ANY OBSTRUCTION BE PROPOSED, IT WILL TAKE THE FORM OF A GATE WITH KNOX LOCK BOXES PROVIDED AS SHOWN ON THIS CONCEPTUAL PLAN OR SOME OTHER MEANS THAT IS APPROVED BY MIAMI-DADE FIRE.

<p align="center"><i>COMPLETE STREET, US-41 INTERSECTION (FIU- SWEETWATER)</i></p>	<p align="center"><i>SHEET NO.</i></p>
	<p><i>13</i></p>



SW 8 STREET WEST OF SW 109 AVENUE
N.T.S.



REVISIONS	
DATE	DESCRIPTION
05.20.2014	DRAFT
04/15	REV.1 BRIDGE LANDING



T·Y·LIN INTERNATIONAL
201 ALHAMBRA CIRCLE SUITE 900
Coral Gables, Florida. 33134
Phone: 305 / 567-1888 Fax: 305 / 567-1771

FLORIDA INTERNATIONAL UNIVERSITY
CITY OF SWEETWATER UNIVERSITY CITY
CONCEPTUAL PLANS FOR COMPLETE STREETS,
PEDESTRIAN ORIENTED SHARED-USE BRIDGE, AND
ADVANCED TRANSIT MULTIMODAL STATION

TYPICAL SECTION

SHEET NO.
17

NOT FOR CONSTRUCTION PLANS

Eugene Collings-Bonfill - P.E., PMP

From: Reyna, Alfredo [Alfredo.Reyna@dot.state.fl.us]
Sent: Thursday, September 15, 2016 4:07 PM
To: Rodrigo Isaza
Cc: FIUBridge; Dempsey, Dwight; Feliciano, Manuel; Hango, Erika N.; Eugene Collings-Bonfill - P.E., PMP; Alberto Delgado
Subject: RE: 15711 UniversityCity - Open ERC Submittals

The submittal will not be close at this time, we will check that all comments are close for each submittal before moving ahead with the next.

Regards

Alfredo Reyna, P.E.

LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us

From: Rodrigo Isaza [<mailto:risaza@mcm-us.com>]
Sent: Thursday, September 15, 2016 3:04 PM
To: Reyna, Alfredo
Cc: FIUBridge; Dempsey, Dwight; Feliciano, Manuel; Hango, Erika N.; Eugene Collings-Bonfill - P.E., PMP; Alberto Delgado
Subject: RE: 15711 UniversityCity - Open ERC Submittals

Alfredo,
Please advise if you were able to address these items.
Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989
MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com
Please consider the environment before printing. A reminder from MCM.... Building Excellence

From: Eugene Collings-Bonfill - P.E., PMP
Sent: Friday, September 09, 2016 3:58 PM
To: Reyna, Alfredo; Alberto Delgado
Cc: FIUBridge; Dempsey, Dwight; Feliciano, Manuel; Hango, Erika N.
Subject: 15711 UniversityCity - Open ERC Submittals

Alfredo,

In reviewing the open ERC Submittals can you please see if the following packages can be closed?

90% Foudnations resubmittal – Comments 18 & 19 have been responded to and should be closed.

100% Roadway – Comments 24 & 30 should be closed these have been discussed previously and keep coming up, 21-23 have been responded to and are awaiting closure.

90% Roadway – no unresolved comments – submittal should be closed

90% Foudnation – 2 open comments that have been addressed with the resubmittal as well as outside Peer Review coordination with Central Office. Please close this submittal.

Eugene Collings-Bonfill - P.E., PMP

From: Reyna, Alfredo [Alfredo.Reyna@dot.state.fl.us]
Sent: Thursday, September 22, 2016 2:51 PM
To: Eugene Collings-Bonfill - P.E., PMP
Cc: Alberto Delgado; FIUBridge; Dempsey, Dwight; Feliciano, Manuel; Yassin, Aiah; Richardson, Dionne G.; Alvarez, Teresita
Subject: RE: 15711 UniversityCity - ERC Foundations Comments

Eugene,
I am coordinating with FDOT the final resolution to the comment...

Alfredo Reyna, P.E.

LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us

From: Eugene Collings-Bonfill - P.E., PMP [<mailto:ecollings@mcm-us.com>]
Sent: Thursday, September 22, 2016 2:45 PM
To: Reyna, Alfredo
Cc: Alberto Delgado; FIUBridge; Dempsey, Dwight; Feliciano, Manuel
Subject: 15711 UniversityCity - ERC Foundations Comments

Alfredo,

In reviewing the comments entered so far for the 100% Foundation Submittal, we AGAIN have Carlos Cejas providing comment No. 4 where he maintains the pylon needs to be moved north. As we have discussed many times, my understanding is this was never an option yet he continues to make the same comment. Can you please discuss this with him or manually close this comment?

Thank you,

EUGENE COLLINGS-BONFILL - P.E., PMP



Follow us!



PH: 305-541-0000 Ext 113 | M: 305-213-9969 | FAX: 305-541-9771
6201 SW 70 ST, 2nd Floor Miami, FL 33143 www.mcm-us.com



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A reminder from MCM, Building Excellence.

30% Project Submittal – Closed by FDOT PM

16. Please add the proposed right side bus only lanes along either side of SR-90/SW 8th Street/Tamiami Trail to all plans. This is a critical item currently in the design stage that will go hand-in-hand with the proposed MDT/FIU transit terminal. Please coordinate this effort with MDT staff as soon as possible (Monica Cejas at 786-469-5290) and provide documentation of coordination.					
2	Categories:	TRANSIT	Assigned To:	Reference:	Multiple Plans and Typical Sections
	Status:	COMMENT RESOLVED			
				Created Date:	4/21/2016
	MANUEL FELICIANO LEAD DESIGNER	This coordination will not hold up submittals of our plans. If MDT does not have plans ready to incorporate The DB Team will not delay submittals.			
	4/1/2016				
	CARLOS CEJAS	REVIEWER	Please leave space for an additional 12 feet wide minimum travel on both the north and south side of SR 90/ SW 8 Street. The plans do not have to be ready.		
	5/20/2016				
	Alfredo Reyna	IN-HOUSE PM	Comment Closed		
	8/16/2016				

90% Foundation Submittal Comment 1 – Reviewer Accepted and Closed

1. Please add the proposed right side bus only lanes along either side of SR-90/SW 8th Street/Tamiami Trail to all plans. This is a critical item currently in the design stage that will go hand-in-hand with the proposed MDT/FIU transit terminal. Please coordinate this effort with MDT staff as soon as possible (Monica Cejas at 786-469-5290) and provide documentation of coordination.				
2. Categories:	ACCESS MANAGEMENT		Assigned To:	Reference:
Status:	RESPONSE ACCEPTED			Previous Comment Multiple Plans & Typical Sections
			Created By:	CARLOS CEJAS (REVIEWER)
			Created Date:	6/16/2016
MANUEL FELICIANO LEAD DESIGNER	FIU sent a draft layout of the proposed MDT lane on May 12th, 2016. The proposed MDT bus lane is only shown on eastbound SW 8th Street/Tamiami Trail near the south landing structures. The proposed lane layout will be shown on the next submittal.			
6/16/2016				
CARLOS CEJAS	REVIEWER	Response Accepted & Comment Closed		
6/16/2016				

90% Roadway Submittal Comment 4 – Still Open

4. Previous Comment: Plans Sheet R-8 and Typical Section Sheet R-12. Please add the proposed right side bus only lanes along either side of SR-90/SW 8th Street/Tamiami Trail to all plans. This is a critical item currently in the design stage that will go hand-in-hand with the proposed MDT/FIU transit terminal. Please coordinate this effort with MDT staff as soon as possible (Monica Cejas at 786-469-5290) and provide documentation of coordination.			
2 Categories:	TRANSIT	Assigned to:	Reference:
Status:	RESPONSE ACCEPTED		Created By:
			Created Date:
MANUEL FELICIANO LEAD DESIGNER	As this information becomes available from MDT/FIU we will reflect it on our plans as "Work to Be Completed Under Separate Contract, by Other".		
6/15/2016			
CARLOS CEJAS	REVIEWER	Please provide documentation	
6/16/2016			
		Previous Comment: Plans R-8 & Typical Section R-12	
		CARLOS CEJAS (REVIEWER)	
		5/18/2016	

90% Foundation Re-Submittal Comment 4 – Closed by FDOT PM

4. The placement of the main column support immediately north of SW 8th Street within FDOT ROW should be moved further north closer to the canal and within SR-90 ROW for several reasons. 1) This proposed location will produce short-term MDT lane closure impacts to traffic along WB SW 8th Street during construction, 2) This proposed location will not accommodate very likely future plans for an additional WB lane along SW 8th Street, and 3) The new overpass bridge will be in place for the next 50 plus years and will create a major physical constraint along this major multimodal transportation corridor. Please relocate the column further north and modify all plans accordingly.

Categories:	TRANSIT	Assigned To:	Reference:	Previous Comment Sheet B-4
Status:	COMMENT RESOLVED		Created By:	CARLOS CEJAS (REVIEWER)
			Created Date:	8/17/2016
MANUEL FELICIANO LEAD DESIGNER	The main column support location was coordinated between FIU and FDOT during the development phase of the RFP documents. It is our understanding that the column can be placed at this location.			
8/17/2016				
CARLOS CEJAS	REVIEWER	As per for the Plans Preparation Manual, Volume 1, Page 8-29, Section 8.7.1: "Lateral upsets must account for future widening plans of the roadway below". This seems to indicate that some type of variation will be required from FDOT.		
8/18/2016				
Alfredo Reyna	IN-HOUSE PM	Comment Closed		
8/19/2016				

From: [Rodrigo Isaza](#)
To: ["Alberto Delgado"](#); ["Jose Morales \(JMorales@BPAMiami.com\)"](#)
Cc: [Eugene Collings-Bonfill - P.E., PMP](#); [Alan Ruiz, P.E.](#); [Christopher Bacallao, P.E.](#); ["kjessell@fiu.edu"](#); ["Robert Griffith"](#); ["jcal@fiu.edu"](#); [Robert T. Murphy, P.E.](#); ["Rafael Urdaneta"](#); ["Angela Baron"](#); ["Dionisio Torres"](#); ["Dempsey, Dwight"](#)
Bcc: ["com-inbound-fiu-db-pedestrian-bridge@procoretech.com"](#)
Subject: RE: FM 434688-1 FIU UniversityCity Pylon location - NOI#001
Date: Thursday, November 03, 2016 4:35:25 PM
Attachments: [B1PlanElev01PROP_11ft_shift_p.pdf](#)
[RE FN No. 43468815201 Contract ARI73 FIU Pylon Location - Meeting Minutes .msg](#)
[434688-1 ARI73 Pylon Relocation - Bus Lane - FDOT Meeting 10-31-16 FIGG.PDF](#)

Alberto/Jose,

As communicated to FDOT on the attached email, the bridge plan/elevation (sheet B-4) has been updated to reflect an 11'-0" bridge movement to the North, in lieu of 12'-0", as directed by FDOT.

In addition, attached please find our comments to the meeting minutes which have been noted in red. Let me know if you have any comments; otherwise, please update and re-distribute.

Lastly, please help expedite FDOT's approval and coordination meeting efforts with the PD&E professional and USACOE.

Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989

MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com

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From: Rodrigo Isaza
Sent: Tuesday, November 01, 2016 5:12 PM
To: 'Alberto Delgado'
Cc: Eugene Collings-Bonfill - P.E., PMP; Alan Ruiz, P.E.; Christopher Bacallao, P.E.; 'kjessell@fiu.edu'; 'Robert Griffith'; 'jcal@fiu.edu'; Robert T. Murphy, P.E.; Jose Morales (JMorales@BPAMiami.com); Rafael Urdaneta; 'Angela Baron'; 'Dionisio Torres'; Dempsey, Dwight
Subject: RE: FM 434688-1 FIU UniversityCity Pylon location - NOI#001

Alberto,

Following our recent meetings and FIU/FDOT directive to proceed with the pylon relocation to accommodate for future widening work related to premium transit services, attached please find proposed typical section/plan denoting a 12'-0" bridge location adjustment to the North.

As agreed during our meeting of 31Oct16, at least two (2) preliminary meetings to obtain concept review/approval by FDOT and/or USACE prior to re-design development and re-permitting must occur to expedite this process and mitigate this significant schedule impact. Consequently, please coordinate/schedule a meeting with the Department's PD&E professional as soon as possible.

In addition, A&P contacted Ms. Teri Swartz and USACOE is available to meet early next week provided that the proposed concept plan is submitted by the end of this week. A&P will coordinate with FIU/FDOT once a date/time has been established. Moreover, due to the proximity to the City of Sweetwater property to the north (~2'-0"), the City Engineer must confirm that zoning issues will not

be encountered and if they are what the process will be to obtain a variance.

Rest assured that MCM will explore all available options to overcome this change as efficiently as possible. However, be reminded that although FIU has not allowed MCM to mobilized to the project and to commence construction this November, per our schedule, FIU has not issued direction in writing to suspend or stop operations. Therefore, absent any written direction to stop, MCM will continue to pursue and finalize the design of the project per its original contract.

Should you have any questions, or comments, please do not hesitate to contact us.

Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989

MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com

Please consider the environment before printing. A reminder from MCM.... Building Excellence

From: Rodrigo Isaza

Sent: Monday, October 24, 2016 3:06 PM

To: 'Alberto Delgado'

Cc: Eugene Collings-Bonfill - P.E., PMP; Alan Ruiz, P.E.; Christopher Bacallao, P.E.; 'kjessell@fiu.edu'; 'Robert Griffith'; 'jcal@fiu.edu'; Robert T. Murphy, P.E.

Subject: RE: FM 434688-1 FIU UniversityCity Pylon location

Alberto,

In reply to FDOT's response to MCM's Letter Log No. FIU004, we acknowledge that FDOT has recognized Item 1 (clearance per Table 2.11.6) is within the PPM design criteria, and is now only referencing the lateral offset regarding future widening.

As stated in our initial response letter regarding the future widening requirements, the Request for Proposal (RFP) provided no reference or requirement to take into account future widening on the Northside of SW 8th Street. The RFP was very detailed regarding the future widening for the Southside, with no detail or reference to widening of the north side.

As it turns out, the PD&E study FDOT referenced held a public kick-off meeting on 21Sep16. At that time, MCM was under contract with FIU (fixed lump sum price), and had already submitted (15Sep16) Final Foundation plans for this project. MCM could not have anticipated the accommodation of a PD&E study that had not commenced prior to submittal of our Technical Proposal and Price for this project. However, if FIU decides to proceed in this direction, MCM must be issued clear direction so that the current design process be stopped and a new design developed. Be reminded MCM is scheduled to commence construction of the Foundation, Substructure, and Superstructure for Span 1 the middle of November.

At this time, MCM continues to pursue the design of the project as previously contracted. However, FDOT is withholding comments on previously submitted plans. Pursuant to section 5-12, please let this serve as MCM's, Notice of Intent to claim for additional cost and time impacts due to this issue. Once FIU has decided on how to proceed, MCM will be submitting a Change Order and request for

contract time extension as per section 8-7.3.2. For tracking purposes, this will be known as Notice of Intent (NOI) #01

In the meantime, and as discussed earlier today, MCM requests a meeting as soon as possible with FIU and the Department to discuss all available options to overcome this condition as efficiently as possible.

We thank you in advance for your understanding of this matter. Should you have any questions, or comments, please do not hesitate to contact us.

Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989

MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com

Please consider the environment before printing. A reminder from MCM.... Building Excellence

From: Alberto Delgado [<mailto:delgadoa@fiu.edu>]

Sent: Monday, October 24, 2016 8:56 AM

To: Rodrigo Isaza

Cc: Eugene Collings-Bonfill - P.E., PMP; Alan Ruiz, P.E.; Christopher Bacallao, P.E.; Robert T. Murphy, P.E.

Subject: FW: FM 434688-1 FIU UniversityCity Pylon location

Rodrigo,

Please find below comments from Dat Huynh regarding the above subject project.

Please review and advise ASAP.

Thanks,

Alberto Delgado



Facilities Construction Services

Facilities Management

11555 S.W. 17TH Street CSC 251

Miami, FL 33199

Tel: 305-348-4036 Fax: 305-348-4010

delgadoa@fiu.edu

From: Reyna, Alfredo [<mailto:Alfredo.Reyna@dot.state.fl.us>]

Sent: Friday, October 21, 2016 4:50 PM

To: Alberto Delgado

Cc: Kenneth Jessell; Desdunes, Harold; Glass Johnson, Linda; Huynh, Dat; Yassin, Aiah; Robert

Griffith; John Cal; Alvarez, Teresita; Richardson, Dionne G.; Iglesias, Daniel; Yi, Alex

Subject: FW: FM 434688-1 FIU UniversityCity Pylon location

Alberto,

After discussion with Dat Huynh, PE, Interim District Design Engineer, see email below in response to "MCM Letter Log No. FIU004 – Pylon Location Package"

Feel free to contact me should you have any comment or question.

Regards

Alfredo Reyna, P.E.

LAP Coordinator - Keith and Schnars, P.A.

Florida Department of Transportation

(305) 470-5288 Fax (305) 470-6737

Alfredo.Reyna@dot.state.fl.us

From: Huynh, Dat

Sent: Friday, October 21, 2016 2:02 PM

To: Yassin, Aiah; Reyna, Alfredo

Cc: Desdunes, Harold; Glass Johnson, Linda; Alvarez, Teresita; Richardson, Dionne G.; Iglesias, Daniel; Yi, Alex

Subject: RE: FM 434688-1 FIU UniversityCity Pylon location

Aiah,

The design office has reviewed the letter from MCM and have the following comments:

- Regarding table 2.11.6 Horizontal Clearance to Bridge and Abutment, although the bridge pier and abutments is proposed to be located no closer than 4 feet from the face of the outside curbs be the guardrail, the criteria may meet the criteria. The minimum barrier offset shall still be met. The Department maintains the need of the lateral offset must account for future widening plans of the roadway.
- Regarding Section 8.71, 4. Vertical clearance criteria found in table 2.10.1 of the Plans Preparation Manual (PPM). The Department maintains the need of the vertical clearance must account for future widening plans of the roadway.

Any deviation of these minimum requirements needs approved design variations/exceptions prior to proceeding with final design. Design variation/exception process is outlined in Chapter 23 of the PPM.

The Department has a current Project Development and Environment (PD&E) Study (FM# 437782-1) for the Premium Transit Corridor along SR 968/Flagler Street from SR 821/Homestead Extension of Florida's Turnpike (HEFT) to SR 5/US-1/Biscayne Blvd and SW 8th Street from SW 142nd Avenue to SW 107th Street that may expand SW 8th Street to accommodate the premium transit services.

Thank you,

Dat Huynh, P.E.
Interim District Design Engineer

Florida Department of Transportation - District 6
Adam Leigh Cann Building
1000 NW 111th Avenue, Room 6102-A
Miami, Florida 33172

Phone: (305) 470-5103; Fax: (305) 470-5380
E-mail: dat.huynh@dot.state.fl.us

From: Yassin, Aiah
Sent: Wednesday, October 19, 2016 11:41 AM
To: Desdunes, Harold; Huynh, Dat
Cc: Reyna, Alfredo; Glass Johnson, Linda; Alvarez, Teresita; Richardson, Dionne G.
Subject: Fwd: FM 434688-1 FIU UniversityCity Pylon location

Good afternoon Dat,
Please advise on FIU justification of the pylon location. If you concur that the solution meets PPM requirements, please let us know. The project is a Design Build contract and we need a response by Noon Friday.
Thank you

----- Forwarded message -----

From: "Alfredo Reyna" <areyna@ksfla.com>
Date: Tue, Oct 18, 2016 at 2:55 PM -0400
Subject: Fwd: FM 434688-1 FIU UniversityCity Pylon location
To: "Yassin, Aiah" <Aiah.Yassin@dot.state.fl.us>

Sincerely,
Sent from my iPhone
[X]

Alfredo Reyna, PE
Miami, Chief Engineer/ LAP

Begin forwarded message:

From: "Alfredo Reyna" <areyna@ksfla.com<<mailto:areyna@ksfla.com>>>
To: "Alfredo Reyna"
<Alfredo.Reyna@dot.state.fl.us<<mailto:Alfredo.Reyna@dot.state.fl.us>>>
Subject: Fwd: FM 434688-1 FIU UniversityCity Pylon location

Sincerely,
Sent from my iPhone
[X]

Alfredo Reyna, PE
Miami, Chief Engineer/ LAP

Begin forwarded message:

From: "Alberto Delgado" <delgadoa@fiu.edu<<mailto:delgadoa@fiu.edu>>>
To: "Alfredo Reyna" <areyna@ksfla.com<<mailto:areyna@ksfla.com>>>
Subject: FW: FM 434688-1 FIU UniversityCity Pylon location

Alfredo,

Please find attached response from MCM regarding the Pylon location.

Thanks,

Alberto Delgado

[FIULogo_H_CMYK]
Facilities Construction Services
Facilities Management
11555 S.W. 17TH Street CSC 251
Miami, FL 33199
Tel: 305-348-4036 Fax: 305-348-4010
delgadoa@fiu.edu<<mailto:delgadoa@fiu.edu>>

From: Rodrigo Isaza [<mailto:risaza@mcm-us.com>]
Sent: Tuesday, October 18, 2016 9:19 AM
To: Alberto Delgado
Cc: Eugene Collings-Bonfill - P.E., PMP; Alan Ruiz, P.E.; Christopher Bacallao, P.E.;
Kenneth Jessell; Robert Griffith; John Cal; Robert T. Murphy, P.E.

Subject: RE: FM 434688-1 FIU UniversityCity Pylon location

Alberto,
Attached please find MCM Letter Log No. FIU004 – Pylon Location for your review and distribution.
Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989
MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com
Please consider the environment before printing. A reminder from MCM.... Building Excellence

From: Alberto Delgado [<mailto:delgadoa@fiu.edu>]
Sent: Wednesday, October 12, 2016 2:07 PM
To: Rodrigo Isaza
Cc: Eugene Collings-Bonfill - P.E., PMP; Alan Ruiz, P.E.; Christopher Bacallao, P.E.
Subject: FW: FM 434688-1 FIU UniversityCity Pylon location

Rodrigo,

Please see below email from FDOT regarding the proposed location of the pylon.

Please review and advise.

Thanks,

Alberto Delgado

[FIULogo_H_CMYK]
Facilities Construction Services
Facilities Management
11555 S.W. 17TH Street CSC 251
Miami, FL 33199
Tel: 305-348-4036 Fax: 305-348-4010
delgadoa@fiu.edu<<mailto:delgadoa@fiu.edu>>

From: Reyna, Alfredo [<mailto:Alfredo.Reyna@dot.state.fl.us>]
Sent: Wednesday, October 12, 2016 1:53 PM
To: Alberto Delgado
Cc: Kenneth Jessell; Robert Griffith; John Cal; Yassin, Aiah; Desdunes, Harold; Nunez, Xiomara
Subject: FW: FM 434688-1 FIU UniversityCity Pylon location

Alberto,

Please advise on the matter regarding the location of the pylon pier inside the clear zone. It is the Department's position that the design team needs to meet the Plans Preparation Manual (PPM) requirements, which are:

- By table: “2.11.6 Horizontal Clearance to Bridge Piers and Abutments” they need to provide minimum

- o 16 feet from the edge of travel lane.

- By Section 8.7.1.

4. Vertical clearance criteria is found in table 2.10.1 of this volume. Lateral offset must account for future widening plans of the roadway below

As per PPM, all deviations of these minimum requirements need approved design variations /exemptions prior to proceeding with final design. Design Variation /exceptions process is outlined in Chapter 23 of the PPM.

Regards

Alfredo Reyna, P.E.
LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
District VI-Adam Leigh Cann Building
Program Management Room 6112A
1000 NW 111th Avenue - Miami, Florida 33172
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us<<mailto:Alfredo.Reyna@dot.state.fl.us>>

From: [Rodrigo Isaza](#)
To: ["Reyna, Alfredo"](#); [Alberto Delgado](#)
Cc: [Kenneth Jessell](#); [Eugene Collings-Bonfill - P.E., PMP](#); [Dempsey, Dwight](#); [Jose Morales](#); [Yassin, Aiah](#); [Desdunes, Harold](#); [Huynh, Dat](#); [Iglesias, Daniel](#); [Vega, Manuel](#); [Espino, Barbara](#); [Alvarez, Teresita](#); [Patrick Meagher](#); [Barrera, Nestor](#); [DelCorral, Armando](#); [Christopher Bacallao, P.E.](#); [Rafael Urdaneta](#); [Robert Herrada \(rherrada@cityofsweetwater.fl.gov\)](#); [Tefel, Teodoro](#); [abaron@apcte.com](#); [dtorres@legacyengineers.com](#); [John Cal \(jcal@fiu.edu\)](#); [Fuentes, Karina](#); [Yi, Alex](#); [Cabrera, Mario](#); [Michel, Marceau](#); [Richardson, Dionne G.](#); [Eric Gomez \(egomez@cityofsweetwater.fl.gov\)](#); ["Angela Baron"](#)
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes
Date: Monday, November 07, 2016 9:44:58 AM
Attachments: [Proposed typical at the bidge.pdf](#)

Alberto/Alfredo,

Per our conversation of Friday, we appreciate the Department's prompt response and acceptance regarding the attached typical section. In addition, you have confirmed that a meeting with the PD&E professional is no longer required. Therefore, we will advise you as soon as a meeting (date/time) with SFWMD/USACOE has been established to ensure the Department's permitting representative (Mr. Manuel Vega) is in attendance.

As it relates to the proposed cover for the pile cap within the canal embankment, this will be determine upon USACOE concept acceptance; however, our preliminary review indicates that the pile cap may need to be built ~2'-0" lower than its current elevation.

Thank you

RODRIGO ISAZA | Sr. Project Manager | PH: 305-541-0000 - Ext 371 | M: 305-970-6989
MCM | 6201 SW 70 St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com.
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-----Original Message-----

From: Reyna, Alfredo [mailto:Alfredo.Reyna@dot.state.fl.us]
Sent: Thursday, November 03, 2016 5:28 PM
To: Eugene Collings-Bonfill - P.E., PMP; Dempsey, Dwight; Jose Morales; Yassin, Aiah; Desdunes, Harold; Huynh, Dat; Iglesias, Daniel; Alberto Delgado; Vega, Manuel; Espino, Barbara; Alvarez, Teresita; Patrick Meagher; Barrera, Nestor; DelCorral, Armando; Christopher Bacallao, P.E.; Rafael Urdaneta; Robert Herrada (rherrada@cityofsweetwater.fl.gov); Tefel, Teodoro; abaron@apcte.com; dtorres@legacyengineers.com; John Cal (jcal@fiu.edu); Fuentes, Karina; Yi, Alex; Michel, Marceau; Richardson, Dionne G.; Eric Gomez (egomez@cityofsweetwater.fl.gov); Rodrigo Isaza
Cc: Kenneth Jessell
Subject: FW: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Alberto, Eugene,

See below response from the Department base on the typical section provided this morning (attached for clarification).

Regards

Alfredo Reyna, P.E.
LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us

-----Original Message-----

From: Iglesias, Daniel
Sent: Thursday, November 03, 2016 5:02 PM
To: Desdunes, Harold
Cc: Reyna, Alfredo; Yassin, Aiah
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Alfredo,

As discussed, the proposed typical section is acceptable and would allow the placement of an additional travel lane in the westbound direction per FDOT criteria. However, the designers need to provide information on the proposed cover for the pile cap within the canal embankment so that we can evaluate whether it would allow for future pier protection. This information is not provided on the typical section submitted.

Daniel Iglesias, P.E.
District Design Engineer
Florida Department of Transportation- District 6 Adam Leigh Cann Building
1000 N.W. 111th Avenue Rm 6102-A
Miami, Florida 33172
Ph: 305-470-5266
Fax: 305-470-5380
email: daniel.iglesias@dot.state.fl.us

-----Original Message-----

From: Desdunes, Harold
Sent: Thursday, November 03, 2016 3:48 PM
To: Iglesias, Daniel
Cc: Reyna, Alfredo; Yassin, Aiah
Subject: FW: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes
Importance: High

Daniel,

This needs your immediate attention.

Thanks

Harold A. Desdunes, P.E.
Director of Transportation Development Florida Department of Transportation - District 6 Adam
Leigh Cann Building
1000 NW 111th Ave. - Room 6233
Miami, Florida 33172
Phone # (305) 470-5464
Email: Harold.Desdunes@dot.state.fl.us

-----Original Message-----

From: Reyna, Alfredo
Sent: Thursday, November 03, 2016 2:25 PM
To: Desdunes, Harold; Iglesias, Daniel
Cc: Glass Johnson, Linda; Yassin, Aiah; Alvarez, Teresita; Richardson, Dionne G.; Vega, Manuel
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes
Importance: High

Here is the new typical,
My question is de we are ok with this...
And if we are do we need a variance?
Regards

Alfredo Reyna, P.E.
LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us

-----Original Message-----

From: Desdunes, Harold
Sent: Thursday, November 03, 2016 8:51 AM
To: Reyna, Alfredo; Yassin, Aiah
Cc: Iglesias, Daniel; Glass Johnson, Linda
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Okay...

Thanks

Harold A. Desdunes, P.E.
Director of Transportation Development Florida Department of Transportation - District 6 Adam
Leigh Cann Building
1000 NW 111th Ave. - Room 6233

Miami, Florida 33172
Phone # (305) 470-5464
Email: Harold.Desdunes@dot.state.fl.us

-----Original Message-----

From: Reyna, Alfredo
Sent: Thursday, November 03, 2016 8:46 AM
To: Desdunes, Harold; Yassin, Aiah
Cc: Iglesias, Daniel; Glass Johnson, Linda
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Harold,
FYI, I requested to the DB team to provide a typical section with full dimensions for the Department review... They should provide it sometime today.
regards

Alfredo Reyna, P.E.
LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us

-----Original Message-----

From: Desdunes, Harold
Sent: Wednesday, November 02, 2016 10:16 PM
To: Reyna, Alfredo; Yassin, Aiah
Cc: Iglesias, Daniel; Glass Johnson, Linda
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Alfredo,

No issue here. Take the 12' lane.

Thanks

Harold A. Desdunes, P.E.
Director of Transportation Development Florida Department of Transportation - District 6 Adam
Leigh Cann Building
1000 NW 111th Ave. - Room 6233
Miami, Florida 33172
Phone # (305) 470-5464
Email: Harold.Desdunes@dot.state.fl.us

-----Original Message-----

From: Eugene Collings-Bonfill - P.E., PMP [<mailto:ecollings@mcm-us.com>]

Sent: Wednesday, November 02, 2016 5:18 PM

To: Reyna, Alfredo <Alfredo.Reyna@dot.state.fl.us>

Cc: Dempsey, Dwight <ddempsey@figgbridge.com>; Jose Morales <JMorales@BPAMiami.com>; Yassin, Aiah <Aiah.Yassin@dot.state.fl.us>; Desdunes, Harold <Harold.Desdunes@dot.state.fl.us>; Huynh, Dat <Dat.Huynh@dot.state.fl.us>; Iglesias, Daniel <Daniel.Iglesias@dot.state.fl.us>; Alberto Delgado <delgadoa@fiu.edu>; Vega, Manuel <Manuel.Vega@dot.state.fl.us>; Espino, Barbara <Barbara.Espino@dot.state.fl.us>; CO-Rhyne, Teleconference Bridge 6 <TCBridge6.CORhyne@dot.state.fl.us>; Alvarez, Teresita <Teresita.Alvarez@dot.state.fl.us>; Patrick Meagher <pmeagher@fiu.edu>; Barrera, Nestor <Nestor.Barrera@dot.state.fl.us>; DelCorral, Armando <Armando.DelCorral@dot.state.fl.us>; Christopher Bacallao, P.E. <cbacallao@mcm-us.com>; Rafael Urdaneta <RUrdaneta@BPAMiami.com>; Robert Herrada (rherrada@cityofsweetwater.fl.gov) <rherrada@cityofsweetwater.fl.gov>; Tefel, Teodoro <Teodoro.Tefel@dot.state.fl.us>; abaron@apcte.com; dtorres@legacyengineers.com; John Cal (jcal@fiu.edu) <jcal@fiu.edu>; Fuentes, Karina <Karina.Fuentes@dot.state.fl.us>; Yi, Alex <Alex.Yi@dot.state.fl.us>; Michel, Marceau <Marceau.Michel@dot.state.fl.us>; Richardson, Dionne G. <Dionne.Richardson@dot.state.fl.us>; Eric Gomez (egomez@cityofsweetwater.fl.gov) <egomez@cityofsweetwater.fl.gov>

Subject: Re: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Alfredo,

Understood, but the design team is not tasked with dictating where the additional lane is to go. The PD&E study will determine the location if any of the additional lane. Our direction at the end of the meeting was to provide the additional space for a future widening along SR90. That sketch has already been provided to FIU for distribution and approval showing an additional 12 feet provided on the North side of SR90.

Thank you

Sent from my iPhone

On Nov 2, 2016, at 5:13 PM, Reyna, Alfredo

<Alfredo.Reyna@dot.state.fl.us<<mailto:Alfredo.Reyna@dot.state.fl.us>>> wrote:

Dwight, Eugene,

The extra lane needs to meet FDOT criteria... I will recommend that the Design Team provide a detail typical section for approval.

Regards

Alfredo Reyna, P.E.

LAP Coordinator - Keith and Schnars, P.A.

Florida Department of Transportation

(305) 470-5288 Fax (305) 470-6737

Alfredo.Reyna@dot.state.fl.us<<mailto:Alfredo.Reyna@dot.state.fl.us>>

From: Eugene Collings-Bonfill - P.E., PMP [<mailto:ecollings@mcm-us.com>]

Sent: Wednesday, November 02, 2016 5:08 PM

To: Dempsey, Dwight; Reyna, Alfredo; Jose Morales; Yassin, Aiah; Desdunes, Harold; Huynh, Dat; Iglesias, Daniel; Alberto Delgado; Vega, Manuel; Espino, Barbara; CO-Rhyne, Teleconference Bridge 6; Alvarez, Teresita; Patrick Meagher; Barrera, Nestor; DelCorral, Armando; Christopher Bacallao, P.E.; Rafael Urdaneta; Robert Herrada

(rherrada@cityofsweetwater.fl.gov<<mailto:rherrada@cityofsweetwater.fl.gov>>); Tefel, Teodoro; abaron@apcte.com<<mailto:abaron@apcte.com>>;

dtorres@legacyengineers.com<<mailto:dtorres@legacyengineers.com>>; John Cal

(jcal@fiu.edu<<mailto:jcal@fiu.edu>>); Fuentes, Karina; Yi, Alex; Michel, Marceau;

dianne.richardson@dot.state.fl.us<<mailto:dianne.richardson@dot.state.fl.us>>; Eric Gomez

(egomez@cityofsweetwater.fl.gov<<mailto:egomez@cityofsweetwater.fl.gov>>)

Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Dwight/Alfredo,

Agreed, if the Department is requesting to provide adequate space for a future widening the Design-Build Team needs direction as to what space to provide. As it was discussed in the meeting the dimension requested was 12 feet. If this is not the case then please provide the dimension needed ASAP in order to coordinate and revise sketches already provided to FIU/FDOT.

Thank you,

EUGENE COLLINGS-BONFILL - P.E., PMP

<image001.gif>

PH: 305-541-0000 Ext 113 | M: 305-213-9969 | FAX: 305-541-9771

6201 SW 70 ST, 2nd Floor Miami, FL 33143 www.mcm-us.com<<http://www.mcm-us.com>>

<image002.gif>

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<http://www.linkedin.com/company/796613?trk=companies_home_ycp_logo_mcm_3>

<image006.png><<https://plus.google.com/117251397849411903403/posts>>

From: Dempsey, Dwight [<mailto:ddempsey@figgbridge.com>]

Sent: Wednesday, November 02, 2016 5:02 PM

To: Reyna, Alfredo; Jose Morales; Yassin, Aiah; Desdunes, Harold; Huynh, Dat; Iglesias, Daniel; Alberto Delgado; Vega, Manuel; Espino, Barbara; CO-Rhyne, Teleconference Bridge 6; Alvarez, Teresita; Eugene Collings-Bonfill - P.E., PMP; Patrick Meagher; Barrera, Nestor; DelCorral, Armando;

Christopher Bacallao, P.E.; Rafael Urdaneta; Robert Herrada
(rherrada@cityofsweetwater.fl.gov<<mailto:rherrada@cityofsweetwater.fl.gov>>); Tefel, Teodoro;
abaron@apcte.com<<mailto:abaron@apcte.com>>;
dtorres@legacyengineers.com<<mailto:dtorres@legacyengineers.com>>; John Cal
(jcal@fiu.edu<<mailto:jcal@fiu.edu>>); Fuentes, Karina; Yi, Alex; Michel, Marceau;
dianne.richardson@dot.state.fl.us<<mailto:dianne.richardson@dot.state.fl.us>>; Eric Gomez
(egomez@cityofsweetwater.fl.gov<<mailto:egomez@cityofsweetwater.fl.gov>>)
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Alfredo,

It is recommended that the lane width should be documented. If 12' is what FDOT is requiring, then it is recommended that the meeting summary reflect this.

Dwight

Dwight D. Dempsey, P.E., S.E.
Regional Director
Southeastern Regional Office
FIGG Bridge Engineers, Inc.
424 N. Calhoun St.
Tallahassee, FL 32301

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ddempsey@figgbridge.com<<mailto:ddempsey@figgbridge.com>>

From: Reyna, Alfredo [<mailto:Alfredo.Reyna@dot.state.fl.us>]
Sent: Wednesday, November 02, 2016 4:58 PM
To: Jose Morales; Yassin, Aiah; Desdunes, Harold; Huynh, Dat; Iglesias, Daniel; Alberto Delgado; Vega, Manuel; Espino, Barbara; CO-Rhyne, Teleconference Bridge 6; Alvarez, Teresita; Eugene Collings-Bonfill - P.E., PMP; Dempsey, Dwight; Patrick Meagher; Barrera, Nestor; DelCorral, Armando; Christopher Bacallao, P.E.; Rafael Urdaneta; Robert Herrada
(rherrada@cityofsweetwater.fl.gov<<mailto:rherrada@cityofsweetwater.fl.gov>>); Tefel, Teodoro;
abaron@apcte.com<<mailto:abaron@apcte.com>>;
dtorres@legacyengineers.com<<mailto:dtorres@legacyengineers.com>>; John Cal
(jcal@fiu.edu<<mailto:jcal@fiu.edu>>); Fuentes, Karina; Yi, Alex; Michel, Marceau;
dianne.richardson@dot.state.fl.us<<mailto:dianne.richardson@dot.state.fl.us>>; Eric Gomez
(egomez@cityofsweetwater.fl.gov<<mailto:egomez@cityofsweetwater.fl.gov>>)
Subject: RE: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Jose,

Please see my comments on the meeting minutes <image007.png> Regards

Alfredo Reyna, P.E.
LAP Coordinator - Keith and Schnars, P.A.
Florida Department of Transportation
(305) 470-5288 Fax (305) 470-6737
Alfredo.Reyna@dot.state.fl.us<mailto:Alfredo.Reyna@dot.state.fl.us>

From: Jose Morales [<mailto:JMorales@BPAMiami.com>]
Sent: Tuesday, November 01, 2016 3:33 PM
To: Reyna, Alfredo; Yassin, Aiah; Desdunes, Harold; Huynh, Dat; Iglesias, Daniel; Alberto Delgado; Vega, Manuel; Espino, Barbara; CO-Rhyne, Teleconference Bridge 6; Alvarez, Teresita; Eugene Collings-Bonfill - P.E., PMP; Dempsey, Dwight; Patrick Meagher; Barrera, Nestor; DelCorral, Armando; Christopher Bacallao, P.E.; Rafael Urdaneta; Robert Herrada (rherrada@cityofsweetwater.fl.gov<mailto:rherrada@cityofsweetwater.fl.gov>); Tefel, Teodoro; abaron@apcte.com<mailto:abaron@apcte.com>; dtorres@legacyengineers.com<mailto:dtorres@legacyengineers.com>; John Cal (jcal@fiu.edu<mailto:jcal@fiu.edu>); Fuentes, Karina; Yi, Alex; Michel, Marceau; dianne.richardson@dot.state.fl.us<mailto:dianne.richardson@dot.state.fl.us>; Eric Gomez (egomez@cityofsweetwater.fl.gov<mailto:egomez@cityofsweetwater.fl.gov>)
Subject: FN No. 434688-1-52-01 / Contract ARI73/ FIU Pylon Location - Meeting Minutes

Good afternoon,

This is to summarize the issues discussed in our meeting held yesterday in reference to Pylon location for the subject project. It is intended to be a cooperative effort and should you have any issues or comments that you wish to add or modify, please send them to me and I will revise this document accordingly; otherwise, we will consider the noted items listed in the attachment as final.

Please forward to all parties you may deem pertinent, specifically the designers from FIGG who participated via conference call.

Sincerely,

Jose E. Morales, PE
Sr. Project Engineer
<image008.jpg>
7205 Corporate Center Drive, Suite 201
Miami, Florida 33126
Mobile: 786-539-9629
www.bpamiami.com<<http://www.bpamiami.com>/>
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FIU Pylon Location Meeting

Date / Time: October 31st, 2016 / 1:00 P.M.

Location: FDOT D6 - 1000 NW 111th Ave, Miami, FL 33172 – Conference Room A

Attendees: See sign-in sheet attached

Bus Lane on SW 8th Street

- An additional through lane is needed on the north side of SW 8th Street for a future **WB travel** lane for MDT.
- The overall required additional width was determined to be 12’.
- The first option being entertained is providing these 12’ on the north side of SW 8th Street.
- This first option places the current location of the pylon in conflict with the bus lane and would require bridge design modifications.

Bridge Design Modifications

- DB Team proposed the simplest option with minimal impacts to design and construction. This option moves the entire bridge structure 12’ towards the north. Below are some of the major implications of this modification:

USACE / SFWMD / C-4 Canal

- The entire foundation and pylon fall entirely within SFWMD ROW / C-4 Canal. This modifies significantly the permits and requirements from SFWMD & USACE:
 - *SFWMD:* DB Team mentioned an initial approach was made to SFWMD and the agency was receptive.
 - *USACE:* A meeting will need to be coordinated with help from FDOT regarding these modifications **to obtain preliminary approval prior to re-design**. 408 & 404 permits will need to be discussed with USACE.
 - *C-4 Canal Slope Protection:* DB Team mentioned a bulkhead wall or additional slope protections systems would be required on the south side of the canal.

FDOT:

- DB Team asked if the review process from FDOT could be expedited if this option is pursued. FDOT was receptive since the modifications would be mostly on the substructure portion of the plans.
- TIGER Grant extension would be needed and FDOT will need to adjust the schedule for completion.

City of Sweetwater:

- The overhang of the bridge on the north side is still within ROW and approaches City of Sweetwater ROW. The City of Sweetwater is receptive to the idea with no objections **but will need to approve inclusive of zoning**

PD&E Study on SW 8th Street

- The historical 109th Ave bridge just East of the project would be impacted by this future additional **travel** lane proposed on the north side of SW 8th Street.
- The option of having both Eastbound & Westbound bus lanes on the south side of SW 8th Street in this section was discussed. This option would mean further agreements between FIU and FDOT regarding ROW issues east and west of this location.
- A meeting will be coordinated by FDOT with the PD&E Team to discuss any options in this area.

Action Items

1. FDOT will help schedule a meeting with USACE as soon as possible **for concept approval and thru re-permitting process**.
2. FDOT will schedule a meeting with PD&E team this week if possible.
3. DB Team to prepare a revised elevation and plan view with this option
4. DB Team to provide a Rough Order of magnitude in additional cost and construction time

ACRONYM KEY:

1. BPA	Bolton Perez & Associates	5. ROW	Right of Way
2. DB	Design Build Firm	6. SFWMD	South Florida Water Management Department
3. FDOT	Florida Department of Transportation	7. USACE	United States Army Corp of Engineers
4. MDT	Miami Dade Transit	8. TIGER	Transportation Investment Generating Economic Recovery

- Current project design meets all PPM offset requirements with use of a curb, gutter, and barrier. Future widening on the North side of SW 8th Street was not specified in the RFP documents.
- The SMART Flagler Corridor PD&E study recently started and is scheduled to last about two years. The overall process cannot be expedited; however, some elements could be advanced. There is a possibility that impacts within this corridor could be identified within a year. The outcome of the PD&E study will largely depend on what the Design-Build team gets approved.
- FIU is willing to shift the bridge 12 ft. They can speak for both landings of the bridge due to an easement at the north end. However, they would like the City of Sweetwater's approval for the north landing.
- FIGG stated the future connection at the North side has not been designed and would require additional strengthening. This connection could be included with any redesign efforts.
- Construction of a second bulkhead wall on the south side of the canal would require another public notice period. Angela to provide contact information for Miami 404 Review to FDOT Permit Coordinator.

SIGN-IN SHEET

NAME	COMPANY	PHONE	EMAIL
JOSE E MORALES	BPA	786 537 629	jmorales@bpamiami.com
Chris Bacallao	MCM	3/541-0000	cbacallao@MCM-US.COM
ALBERTO DELGADO	FIU-FC	305-348-4036	delgado@fiu.edu
EUGENE COLLINGS-BONFIL	MCM	3/213-9969	ecollings@MCM-US.COM
AIAH YASSIN	FDOT	3/470-5485	aiah.yassin@dot.state.fl.us
ROBERT HERRERA	SWEETWATER	3/525-0594	rherrera@cityofsweetwater.fl.gov
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DAT HUYNH	FDOT	305 470-5203	DAT.HUYNH@DOT.STATE.FL.US
Rodrigo Irujo	MCM	305-970-6089	irujo@MCM-US.COM
Angela Baron	APCTE	305-592-1283	abarona@apcte.com
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	FIGG	CALING	
ERICK	SWEETWATER	CAU-11	
Marceau Michel	FDOT	3/470-5223	marceau.michel@dot.state.fl.us
Dionne Richardson	FDOT	305-470-5292	dionne.richardson@dot.state.fl.us